

UD
160
.A
1918

Kellener

Infantry Drill Regulations

====(PROVISIONAL)====

AMERICAN
EXPEDITIONARY
FORCES

▼

Part 1

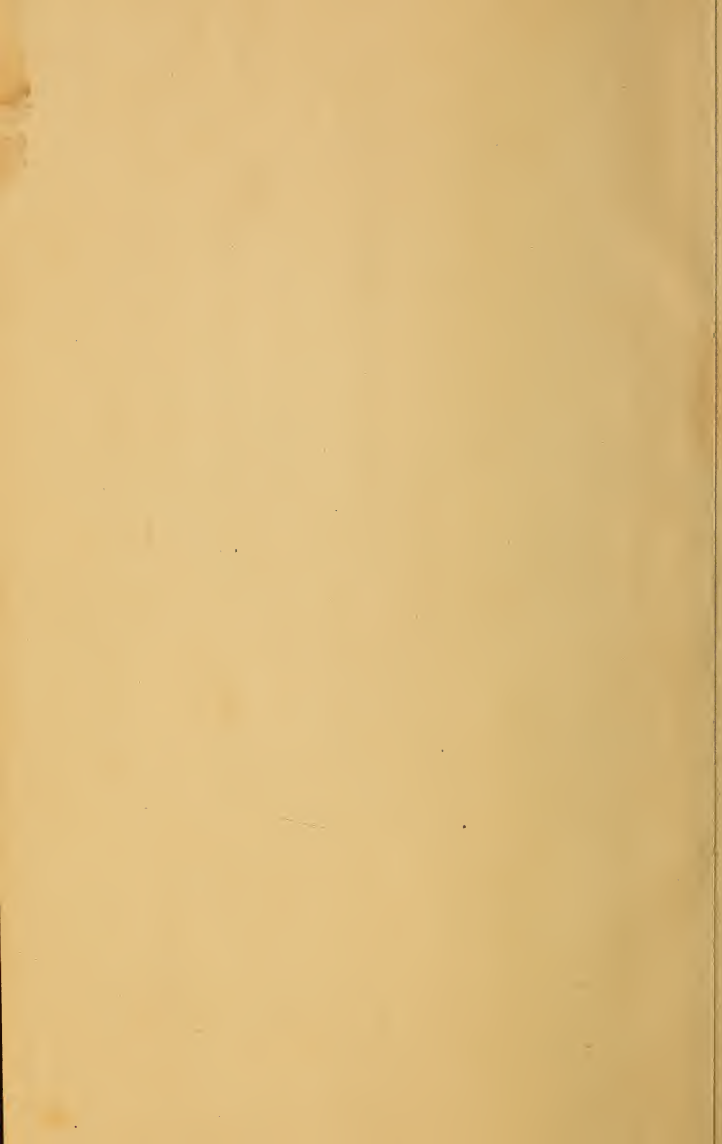
▼

1918

~~Confidential!~~







3.
an
ca

!



U.S. Army, A.E.F., 1917-1920.
o o o

Infantry Drill Regulations

(PROVISIONAL)

American Expeditionary
Forces

—

Part 1



1918



WASHINGTON
GOVERNMENT PRINTING OFFICE
1919

MARINE CORPS HISTORICAL LIBRARY

Infantry
Drill Regulations

United States Marine Corps

1901

8101

MARINE CORPS

MAY 19 1972

REFERENCE BRANCH

Mu 501

49
160
A5
1918a
PT. 1
2-5-5
2

PREFACE.

GENERAL HEADQUARTERS
AMERICAN EXPEDITIONARY FORCES,
France, December 12, 1918.

The following Provisional Infantry Drill Regulations are published for the information and guidance of the American Expeditionary Forces.

By command of Gen. Pershing:

JAMES W. MCANDREW,
Chief of Staff.

Official:

ROBERT C. DAVIS,
Adjutant General.

TABLE OF CONTENTS.

CHAPTER I.—DRILL.

	Paragraph.
1. Introduction	1-29
2. Orders, commands, signals	30-46
3. School of the soldier	47-100
4. School of the squad	101-160
5. School of the platoon	161-236
(a) Close order	168-199
(b) Extended order	200-220
(c) Fire	221-236
6. School of the company	237-271
7. The battalion	272-283
8. The regiment	284-296

CHAPTER II.—INFANTRY WEAPONS.

Rifle and bayonet	297-298
Automatic rifle	299, 300
Machine gun	301
Grenades	302-304
One-pounder gun	305, 306
Light mortar	307

CHAPTER III.—COMBAT.

General	308-315
---------------	---------

CHAPTER IV.—OFFENSIVE COMBAT.

1. General principles	316-327
2. Combat reconnaissance	328-336
3. Orders	337-342
4. Deployment	343-357
5. Advancing the attack	358-360
6. The fire attack	361-371
7. The assault	372-376

TABLE OF CONTENTS.

	Paragraph.
8. Position warfare	377-384
9. The platoon	385-415
10. The company	416-443
11. The battalion	444-495
12. The regiment	496-510
13. The brigade	511-520
14. Intercommunication	521-528
15. Supporting artillery	529-538
16. Supporting tanks	539-549
17. Infantry and airplanes	550, 551

INFANTRY DRILL REGULATIONS (PROVISIONAL), AMERICAN EXPEDITIONARY FORCES, 1918.

PART I.

DEFINITIONS.

Accessory defenses: Wire entanglements, land mines, chevaux-de-frise, traps, and other obstacles constituting the passive elements of defense.

Accompanying weapons: One-pounders, light mortars, and artillery pieces attached to infantry battalions for an attack.

Alignment: A straight line upon which several elements are formed, or are to be formed, or the dressing of several elements upon a straight line.

Approach trench: A trench serving to connect fire trenches or an intrenched area with the rear.

Base: The element on which a movement is regulated.

Battle sight: The position of the rear sight when the leaf is laid down.

Center: The middle point or element of a command.

Column: A formation in which the elements are placed one behind another.

Containing action (or holding attack): An attack designed to hold the enemy to his positions, and prevent him from withdrawing a portion of his forces and employing them elsewhere.

Cover trench: A trench designed primarily solely for the purpose of affording cover from hostile fire.

Demonstration: An attack delivered on a front where a decision is not sought and made with the object of deceiving the enemy as to the point of decisive action.

Deploy: To extend the front. In general, to change from column to line, or from close order to extended order.

Depth: The space from head to rear of any formation or of a position, including the leading and rear elements. The depth of a man is assumed to be 12 inches.

Distance: Space between elements in the direction of depth. Distance is measured from the back of the man in front to the breast of the man in rear. The distance between ranks is 40 inches in both line and column.

Echelon: One of a series of elements formed one behind the other. Also a modification of a line formation in which the elements on one or both flanks are disposed to the rear of those on their right or left.

Echelonment: Act of retiring the flank element of a line.

Element: A file, squad, platoon, company, or larger body, forming part of a still larger body.

File: Two men, the front-rank man and the corresponding man of the rear rank. The front-rank man is the file leader. A file which has no rear-rank man is a blank file. The term file applies also to a single man in a single-rank formation.

File closers: Such officers and noncommissioned officers of a company as are posted in rear of the line. For convenience, all men posted in the line of file closers.

Firing trench: A trench designed and constructed so as to facilitate the delivery of fire.

Flank: The right or left of a command in line or in column, or the element on the right or left of the line. Also the side of a force or a position in the direction of depth.

Formation: Arrangement of the elements of a command. The placing of all fractions in their order in line, in column, or for battle.

Front: The direction of the enemy. When a combat situation does not exist or is not assumed, the front is the direction toward which the command is faced; also the side of a force or position toward the enemy.

Frontage: The space occupied by an element measured from one flank to the opposite flank. The frontage of a man is assumed to be 22 inches.

Guide: An officer, noncommissioned officer, or private upon whom the command or elements thereof regulates its march.

Head: The leading element of a column.

Interval: Space between elements of the same line. The interval between men in ranks is 4 inches and is measured from elbow to elbow. Between companies, squads, etc., it is measured from the left elbow of the left man or guide of the group on the right to the right elbow of the right man or guide of the group on the left.

Left: The left extremity or element of a body of troops.

Line: A formation in which the different elements are abreast of each other.

Order, close: The formation in which the units, in double rank, are arranged in line or in column with normal intervals and distances.

Order, extended: The formation in which the units are separated by intervals greater than in close order.

Pace: Thirty inches; the length of the full step in quick time.

Point of rest: The point at which a formation begins. Specifically, the point toward which units are aligned in successive movements.

Rank: A line of men placed side by side.

Right: The right extremity or element of a body of troops.

Support platoons: The platoons of the company used as a support to the assaulting platoons.

Wave: One of a series of lines of skirmishers or small columns into which an attacking unit is deployed.

CHAPTER I.

DRILL.

INTRODUCTION.

1. Success in battle is the ultimate object of all military training; success may be looked for only when the training is intelligent and thorough.

2. Commanding officers are accountable for the proper training of their respective organizations within the limits prescribed by regulations and orders.

The excellence of an organization is judged by its field efficiency. The field efficiency of an organization depends primarily upon its effectiveness as a whole. Thoroughness and uniformity in the training of the units of an organization are indispensable to the efficiency of the whole; it is by such means alone that the requisite teamwork may be developed.

3. Simple movements and elastic formations are essential to correct training for battle.

4. The Drill Regulations are furnished as a guide. They provide the principles for training and for increasing the probability of success in battle.

In the interpretation of the regulations, the spirit must be sought. Quibbling over the minutiae of form is indicative of failure to grasp the spirit.

5. The following important distinctions must be observed:

(a) Drills executed at attention and the ceremonies are disciplinary exercises designed to teach precise and soldierly movement, and to inculcate that prompt and subconscious obedience which is essential to proper military control. To this end, smartness and precision should be exacted in the execution of every detail. Such drills should be frequent, but short.

(b) The purpose of extended-order drill is to teach the mechanism of deployment, of the firings, and, in general, of the employment of troops in combat. Such drills are in the nature of disciplinary exercises and should be frequent, thorough, and exact in order to habituate men to the firm control of their leaders. Extended-order drill is executed at ease. The platoon is the largest unit which executes extended-order drill.

(c) Field exercises are for instruction in the duties incident to campaign. Assumed situations are employed. Each exercise should conclude with a discussion, on the ground, of the exercise and principles involved.

(d) The combat exercise, a form of field exercise of the platoon, company, battalion, and larger units, consists of the application of tactical principles to assumed situations, employing in the execution the appropriate formations and movements of close and extended order.

Combat exercises must simulate, as far as possible, the battle conditions assumed. In order to familiarize both officers and men with such conditions, platoons, companies, and battalions will frequently be consolidated to provide war-strength organizations. Officers and noncommissioned officers not required to complete the full quota of the units participating are assigned as observers or umpires.

The firing line can rarely be controlled by the voice alone; thorough training to insure the proper use of prescribed signals is necessary.

The exercise should be followed by a brief drill at attention in order to restore smartness and control.

6. In field exercises, the enemy is said to be imaginary when his position and force are merely assumed; outlined when his position and force are indicated by a few men; represented when a body of troops acts as such.

GENERAL RULES FOR DRILLS AND FORMATIONS.

7. When the preparatory command consists of more than one part, its elements are arranged as follows:

(1) For movements to be executed successively by the subdivisions or elements of an organization: (a) Description of the movement; (b) how executed, or on what element executed.

(2) For movements to be executed simultaneously by the subdivisions of an organization: (a) The designation of the subdivisions; (b) the movement to be executed.

8. Movements that may be executed toward either flank are explained as toward but one flank, it being necessary to substitute the word "left" for "right," and the reverse, to have the explanation of the corresponding movement toward the other flank. The commands are given for the execution of the movements toward either flank. The substitute word of the command is placed within parentheses.

9. Any movement may be executed either from the halt or when marching, unless otherwise prescribed. If at a halt,

the command for movements involving marching need not be prefaced by forward, as 1. Column right (left), 2. **MARCH**.

10. Any movement not specially excepted may be executed in double time.

If at a halt, or if marching in quick time, the command double time precedes the command of execution.

11. In successive movements executed in double time, the leading or base unit marches in quick time when not otherwise prescribed; the other units march in double time to their places in the formation ordered and then conform to the gait of the leading or base unit. If marching in double time, the command double time is omitted. The leading or base unit marches in quick time; the other units continue in double time to their places in the formation ordered and then conform to the gait of the leading or base unit.

12. To hasten the execution of a movement begun in quick time, the command: 1. Double time, 2. **MARCH**, is given. The leading or base unit continues to march in quick time, or remains at halt if already halted; the other units complete the execution of the movement in double time and then conform to the gait of the leading or base unit.

13. To stay the execution of a movement, when marching, for the correction of errors, the command: 1. In place, 2. **HALT**, is given. All halt and stand fast, without changing the position of the pieces. To resume the movement the command: 1. Resume, 2. **MARCH**, is given.

14. To revoke a preparatory command, or, being at a halt, to begin anew a movement improperly begun, the command, **AS YOU WERE**, is given, at which the movement ceases and the former position is resumed.

15. Unless otherwise announced, the guide of a platoon or subdivision of a company in line is right; of a company in line or line of subdivisions, center; of a rank in column of squads, toward the side of the guide of the column.

To march with guide other than as prescribed above, or to change the guide: Guide (right, left, or center).

In successive formations into line, the guide is toward the point of rest; in platoons or larger subdivisions, it is so announced.

The announcement of the guide, when given in connection with a movement, follows the command of execution for that movement.

16. The turn on the fixed pivot by subdivisions is used in all formations from line into column and the reverse.

The turn on the moving pivot is used by subdivisions of a column in executing changes of direction.

17. Partial changes of direction may be executed :

By interpolating in the preparatory command the word *half*, as *Column half right (left)*, or *Right (left) half turn*. A change of direction of 45° is executed.

By the command: **INCLINE TO THE RIGHT (LEFT)**. The guide, or guiding element, moves in the indicated direction, and the remainder of the command conforms. This movement effects slight changes of direction.

18. The designations line of sections, line of platoons, line of companies, etc., refer to the formations in which the sections, platoons, companies, etc., each in column of squads, are in line.

19. Full distance in column of subdivisions is such that in forming line to the right or left the subdivisions will have their proper intervals.

In column of subdivisions, the guide of the leading subdivision is charged with the step and direction; the guides in rear preserve the trace, step, and distance.

20. In close order, all details, detachments, and other bodies of troops are habitually formed in double rank.

To insure uniformity of interval between files when falling in and in alignments, each man places the palm of the left hand upon the hip, fingers pointing downward. In the first case the hand is dropped by the side when the next man on the left has his interval; in the second case, at the command front.

21. The posts of officers, noncommissioned officers, special units, etc., in the various formations of the platoon, company, battalion, or regiment are shown in plates.

In all changes from one formation to another involving a change of post on the part of any of these, posts are promptly taken by the most convenient route as soon as practicable after the command of execution for the movement; officers and non-commissioned officers who have prescribed duties in connection with the movement ordered take their new posts when such duties are completed.

As instructions, officers and noncommissioned officers go wherever their presence is necessary. As file closers, it is their duty to rectify mistakes and insure steadiness and promptness in the ranks.

22. Except at ceremonies, the special units have no fixed places. They take places as directed; in the absence of directions they conform as nearly as practicable to the plates, and in subsequent movements maintain their relative positions with respect to the flank or end of the command on which they were originally posted.

23. General, field, and staff officers are habitually mounted. The staff of an officer forms in single rank 3 paces in rear of

him, the right of the rank extending 1 pace to the right of a point directly in rear of him. Members of the staff are arranged in order from right to left, as follows: General staff officers, adjutant, aids, other staff officers, arranged in each classification in order of rank, the senior on the right. The flag of the general officer and the orderlies are 3 paces in rear of the staff, the flag on the right. When necessary to reduce the front of the staff and orderlies, each line executes twos right or fours right, as explained in the Cavalry Drill Regulations, and follows the commander.

24. In making the about, an officer, mounted, habitually turns to the left.

When the commander faces to give commands the staff, flag, and orderlies do not change position.

25. When making or receiving official reports, all officers will salute.

Military courtesy requires the junior to salute first, but when the salute is introductory to a report made at a military ceremony or formation, to the representative of a common superior (as, for example, to the adjutant, officer of the day, etc.), the officer making the report, whatever his rank, will salute first; the officer to whom the report is made will acknowledge by saluting that he has received and understood the report.

26. For ceremonies, all mounted soldiers of a regiment of smaller unit, except those belonging to the machine-gun company, may be consolidated into a detachment; the senior present commands if no officer is in charge. The detachment is formed as a platoon or squad of cavalry in line or column of fours; non-commissioned staff officers are on the right or in the leading ranks.

27. For ceremonies, such of the regimental and battalion non-commissioned staff officers as are dismounted are formed 5 paces in rear of the color, in order of rank from right to left. In column of squads they march as file closers.

28. Other than for ceremonies, noncommissioned staff officers and orderlies accompany their immediate chiefs unless otherwise directed. If mounted, the noncommissioned staff officers are ordinarily posted on the right or at the head of the orderlies.

29. In all formations and movements, a noncommissioned officer commanding a platoon carries his piece as the men do, if he is so armed, and takes the same post as an officer in like situation. When a platoon is formed in line for ceremonies, a noncommissioned officer in command takes post on the right of the right guide after the unit has been aligned.

ORDERS, COMMANDS, AND SIGNALS.

30. Commands only are employed in drill at attention. Otherwise either a command, signal, or order is employed, as best suits the occasion, or one may be used in conjunction with another.

31. Signals should be freely used in instruction, in order that officers and men may readily know them. In making arm signals, the rifle or headdress may be held in the hand.

32. Officers and men fix their attention at the first word of command, the first note of the bugle or whistle, or the first motion of the signal. A signal includes both the preparatory command and the command of execution; the movement commences as soon as the signal is understood, unless otherwise prescribed.

33. Except in movements executed at attention, commanders or leaders of subdivisions repeat orders, commands, or signals whenever such repetition is deemed necessary to insure prompt and correct execution.

In extended order during real or simulated firings, squad leaders, and, if necessary, individual men transmit orders by word of mouth along the skirmish line, always stating the source of the order. Transmission of orders by this means requires especial training.

Officers, platoon and section leaders, and platoon sergeants are equipped with whistles. The major and his staff will use a whistle of distinctive tone; the captain a second and distinctive whistle; platoon and section leaders and platoon sergeants a third distinctive whistle.

34. Prescribed signals are limited to such as are essential as a substitute for the voice under conditions which render the voice inadequate.

Before or during an engagement, special signals may be agreed upon to facilitate the solution of such special difficulties as the particular situation is likely to develop, but it must be remembered that simplicity and certainty are indispensable qualities of a signal.

35. The use of signals with the technical signaling apparatus, rockets, panels, etc., is governed by the provisions of Liaison for All Arms.

ORDERS.

36. In these regulations an order embraces instructions or directions given orally or in writing in terms suited to the particular occasion and not prescribed herein.

Orders are employed only when the commands prescribed herein do not sufficiently indicate the will of the commander.

COMMANDS.

37. In these regulations a command is the will of the commander expressed in the phraseology prescribed herein.

38. There are two kinds of commands:

The preparatory command, such as **forward**, indicates the movement that is to be executed.

The command of execution, such as **MARCH**, **HALT**, or **ARMS**, causes the execution.

Preparatory commands are distinguished by small heavy type; those of execution by **CAPITALS**.

Where it is not mentioned in the text who gives the commands prescribed, they are to be given by the commander of the unit concerned.

The preparatory command should be given at such an interval of time before the command of execution as to admit of being properly understood; the command of execution should be given at the instant the movement is to commence.

The tone of command is animated, distinct, and of a loudness proportioned to the number of men for whom it is intended.

Each preparatory command is enunciated distinctly, with a rising inflection at the end, and in such manner that the command of execution may be more energetic.

The command of execution is firm in tone and brief.

39. Captains and commanders of units larger than a company repeat such commands of their superiors as are to be executed by their units, facing their units for that purpose. The company is the largest unit that executes a movement at the command of execution of its commander, except that at ceremonies and inspections the battalion executes movements at the command of execution of the major or his adjutant.

40. When giving commands to troops, it is usually best to face toward them.

Indifference in giving commands must be avoided, as it leads to laxity in execution. Commands should be given with spirit at all times.

BUGLE SIGNALS.

41. Bugle signals may be used in field exercises and practice firing; their use on the battle field is prohibited.

WHISTLE SIGNALS.

42. Attention to orders. A short blast of the whistle. This signal is used on the march or in combat when necessary to fix the attention of troops, or of their commanders or leaders, preparatory to giving commands, orders, or signals.

When the firing line is firing, each squad leader suspends firing and fixes his attention at a short blast of his platoon or section leader's whistle. The platoon or section leader's subsequent commands or signals are repeated and enforced by the squad leader. If a squad leader's attention is attracted by a whistle other than that of his platoon or section leader, or if there are no orders or commands to convey to his squad, he resumes firing at once.

Suspend firing. A long blast of the whistle.

All other whistle signals are prohibited.

ARM SIGNALS.

43. The following arm signals are prescribed. In making signals, either arm may be used. Officers who receive signals on the firing line "repeat back" at once to prevent misunderstanding.

Forward, march; By the right (left) flank, march; To the rear, march. Face and move in the direction of march; at the same time, extend the arm vertically to its full extent and lower it to the front (flank, rear) until horizontal.

Quick time, march. Raise the right elbow to a position above and to the right of the right shoulder; extend the forearm to the left, right hand above the head.

Halt. Carry the hand to the shoulder; thrust the hand upward and hold the arm vertically.

Lie down (or take cover). Turn toward the skirmishers and raise the hand in front of the elbow, forearm horizontal; thrust the hand downward several times, palm toward the ground.

Double time, march or rush. Carry the hand to the shoulder; rapidly thrust the hand upward the full extent of the arm several times.

Change direction. The hand on the side toward which the change of direction is to be made is carried across the body to the opposite shoulder, forearm horizontal; then swing in a horizontal plane, arm extended, pointing in the new direction.

As skirmishers, march. Raise both arms laterally until horizontal. If necessary, lower the arm in the direction of march after completion of signal as in **forward march**, etc.

As skirmishers, right (left), march. Raise both arms laterally until horizontal; swing the arm on the side toward which the deployment is to be made, upward until vertical and return it to the horizontal; repeat several times; hold the other arm steadily in the horizontal position.

Assemble, march. Raise the arm vertically to its full extent and describe large horizontal circles.

Range, or change elevation. To announce range, extend the arm toward the leaders or men for whom the signal is intended, fist closed; by keeping the fist closed battle sight is indicated; open the fist once for 500 yards, twice for 1,000 yards, etc., and thrust the fist upward once for each additional 100 yards; to add 50 yards describe a short horizontal line with the forefinger. To change elevation, indicate the complete new range.

Are you ready? or I am ready. Raise the hand, fingers extended and joined, palm toward the person addressed.

Commence firing. Move the arms extended in full length, hand palm down, several times, through a horizontal arc in front of the body.

Fire faster. Execute rapidly the signal **Commence firing.**

Fire slower. Execute slowly the signal **Commence firing.**

To indicate a new target Extend the arm in full length to the front, palm to the right (left); swing the arm to right (left), and point in the direction of the new target.

Fix bayonet. Simulate the movement of the right hand in **Fix bayonet.**

Suspend firing. Raise and hold the forearm steadily in a horizontal position in front of the forehead, palm of the hand to the front.

Cease firing. Raise the forearm as in suspend firing and swing it up and down several times in front of the face.

Section. Extend the arm horizontally toward the section leader; describe large circles with the entire arm.

Squad. Extend the arm horizontally toward the section leader; swing the hand up and down from the wrist.

44. The signals, **section** and **squad**, are intended primarily for communication between the platoon leader and his section leaders. The signal **section** or **squad** indicates that the section leader is to cause the signal which follows to be executed by section or squad.

SIGNAL FLAGS.

45. The signal flags described below are carried by the company musicians in the field.

In a regiment in which it is impracticable to make the permanent battalion division alphabetically, the flags of a battalion are as shown; flags are assigned to the companies alphabetically, within their respective battalions, in the order given below:

First Battalion:

Company A, red field, white square.

Company B, red field, blue square.

Company C, red field, white diagonals.

Company D, red field, blue diagonals.

Second Battalion:

- Company E, white field, red square.
- Company F, white field, blue square.
- Company G, white field, red diagonals.
- Company H, white field, blue diagonals.

Third Battalion:

- Company I, blue field, red square.
- Company K, blue field, white square.
- Company L, blue field, red diagonals.
- Company M, blue field, white diagonals.

46. In addition to their use in visual signaling, these flags serve to mark the assembly point of the company when disorganized by combat, and to mark the location of company headquarters in bivouac and elsewhere, when such use is desirable.

SCHOOL OF THE SOLDIER.

47. The instructor explains briefly each movement, first executing it himself, if practicable. He requires the recruits to take the proper positions unassisted and does not touch them for the purpose of correcting them, except when they are unable to correct themselves. He avoids keeping them too long at the same movement, although each should be understood before passing to another. He exacts by degrees the desired precision and uniformity.

48. In order that all may advance as rapidly as their abilities permit, the recruits are grouped according to proficiency as instruction progresses. Those who lack aptitude and quickness are separated from the others and placed under experienced drill masters.

INSTRUCTION WITHOUT ARMS.

49. For preliminary instruction, a number of recruits, usually not exceeding three or four, are formed as a squad in single rank.

Position of the Soldier, or Attention.

50. Heels on the same line and as near each other as the conformation of the man permits.

Feet turned out equally and forming an angle of about 45°.

Knees straight without stiffness.

Hips level and drawn back slightly; body erect and resting equally on hips; chest lifted and arched; shoulders square and falling equally.

Arms and hands hanging naturally, thumb along the seam of the trousers.

Head erect and squarely to the front, chin drawn in so that the axis of the head and neck is vertical; eyes straight to the front.

Weight of the body resting equally upon the heels and balls of the feet.

The Rests.

51. Being at a halt, the commands are: **FALL OUT; REST; AT EASE;** and, 1. **Parade,** 2. **REST.**

At the command **fall out**, the men may leave the ranks, but are required to remain in the immediate vicinity. They resume their former places, at attention, at the command **fall in**.

At the command **rest**, each man keeps one foot in place, but is not required to preserve silence or immobility.

At the command **at ease**, each man keeps one foot in place and is required to preserve silence but not immobility.

52. 1. **Parade,** 2. **REST.** Carry the right foot 6 inches straight to the rear, left knee slightly bent; clasp the hands, without constraint, in front of the center of the body, fingers joined, left hand uppermost, left thumb clasped by the thumb and forefinger of the right hand; preserve silence and steadiness of position.

53. To resume the attention: 1. **Squad,** 2. **ATTENTION.** The men take the position of the soldier.

Eyes Right or Left.

54. 1. **Eyes,** 2. **RIGHT (LEFT),** 3. **FRONT.**

At the command **right**, turn the head to the right oblique, eyes fixed on the line of eyes of the men in, or supposed to be in, the same rank. At the command **front**, turn the head and eyes to the front.

Facings.

55. To the flank: 1. **Right (left),** 2. **FACE.**

Raise slightly the left heel and right toe; face to the right, turning on the right heel, assisted by a slight pressure on the ball of the left foot; place the left foot by the side of the right. Left face is executed on the left heel in the corresponding manner.

Right (left) half face is executed similarly, facing 45° .

"To face in marching" and advance, turn on the ball of either foot and step off with the other foot in the new line of direction; to face in marching without gaining ground in the new direction, turn on the ball of either foot and mark time.

56. To the rear: 1. **About,** 2. **FACE.**

Carry the toe of the right foot about a half foot-length to the rear and slightly to the left of the left heel without changing the position of the left foot; face to the rear, turning to the right on the left heel and right toe; place the right heel by the side of the left.

Salute with the Hand.

57. 1. Hand, 2. SALUTE

Raise the right hand smartly till the tip of the forefinger touches the lower part of the headdress or forehead above the right eye, thumb, and fingers extended and joined, palm to the left, forearm inclined at about 45° , hand and wrist straight; at the same time look toward the person saluted. (TWO) Drop the arm smartly by the side.

STEPS AND MARCHINGS.

58. All steps and marchings executed from a halt, except right step, begin with the left foot.

59. The length of the full step in quick time is 30 inches, measured from heel to heel, and the cadence is at the rate of 128 steps per minute. *C. I. D. R. No. 1, 1921.*

The length of the full step in double time is 36 inches; the cadence is at the rate of 180 steps per minute.

The instructor, when necessary, indicates the cadence of the step by calling one, two, three, four, or left, right, the instant the left and right foot, respectively, should be planted.

60. The command of execution for all movements to be executed while marching is given as either foot strikes the ground, except as otherwise specifically prescribed in these regulations; the movement commences when the following foot is planted.

61. All steps and marchings and movements involving march are executed in quick time unless the squad be marching in double time, or double time be added to the command. In the latter case, double time is added to the preparatory command. Example: 1. Squad right, double time, 2. MARCH. (School of the Squad.)

Quick Time.

62. Being at a halt, to march forward in quick time: 1. Forward, 2. MARCH.

At the command forward, shift the weight of the body to the right leg, left knee straight.

At the command march, move the left foot smartly straight forward 30 inches from the right, sole near the ground, and plant it without shock; next, in like manner, advance the right

foot and plant it as above; continue the march. The arms swing naturally.

63. Being at a halt, or in march in quick time, to march in double time: 1. **Double time**, 2. **MARCH**.

If at a halt, at the first command shift the weight of the body to the right leg. At the command **march**, raise the forearms, fingers closed, to a horizontal position along the waist line; take up an easy run with the step and cadence of double time, allowing a natural swinging motion to the arms.

If marching in quick time, at the command **march**, given as either foot strikes the ground, take one step in quick time, and then step off in double time.

64. To resume the quick time: 1. **Quick time**, 2. **MARCH**

At the command **march**, given as either foot strikes the ground, advance and plant the other foot in double time; resume the quick time, dropping the hands by the sides.

To Mark Time.

65. Being in march: 1. **Mark time**, 2. **MARCH**.

At the command **march**, given as either foot strikes the ground, advance and plant the other foot; bring up the foot in rear and continue the cadence by alternately raising each foot about 2 inches and planting it on line with the other.

Being at a halt, at the command **march**, raise and plant first the left foot, then the right, as described above.

The Half Step.

66. 1. **Half step**, 2. **MARCH**.

Take steps of 15 inches in quick time, 18 inches in double time.

67. Forward, half step, halt, and mark time may be executed one from the other in quick or double time.

To resume the full step from half step or mark time: 1. **Forward**, 2. **MARCH**.

Side Step.

68. Being at a halt or mark time: 1. **Right (left) step**, 2. **MARCH**.

Carry and plant the right foot 15 inches to the right, bring the left foot beside it, and continue the movement in the cadence of quick time.

The side step is used for short distances only and is not executed in double time.

If at order arms, the side step is executed at trail without command.

Back Step.

69. Being at a halt or mark time: 1. **Backward**, 2. **MARCH**. Take steps of 15 inches straight to the rear.

The back step is used for short distances only and is not executed in double time.

If at order arms, the back step is executed at trail without command.

To Halt.

70. To arrest the march in quick or double time: 1. **Squad**, 2. **HALT**.

At the command halt, given as either foot strikes the ground, plant the other foot as in marching; raise and place the first foot by the side of the other. If in double time, drop the hands by the sides.

To March by the Flank.

71. Being in march: 1. **By the right (left) flank**, 2. **MARCH**.

At the command march, given as the right foot strikes the ground, advance and plant the left foot, then face to the right in marching and step off in the new direction with the right foot.

To March to the Rear.

72. Being in march: 1. **To the rear**, 2. **MARCH**.

At the command march, given as the right foot strikes the ground, advance and plant the left foot, turn to the right about on the balls of both feet, and immediately step off with the left foot.

If marching in double time, turn to the right about, taking four steps in place, keeping the cadence, and then step off with the left foot.

Change Step.

73. Being in march: 1. **Change step**, 2. **MARCH**.

At the command march, given as the right foot strikes the ground, advance and plant the left foot; plant the toe of the right foot near the heel of the left and step off with the left foot.

The change on the right foot is similarly executed, the command march being given as the left foot strikes the ground.

MANUAL OF ARMS.

74. As soon as practicable the recruit is taught the use, nomenclature, and care of his rifle; when fair progress has been

made in the instruction without arms, he is taught the manual of arms; instruction without arms and that with arms alternate. In describing the manual of arms, the term "At the balance" in this text refers to the actual center of gravity of the model 1903 rifle and to the center of the groove on the hand guard of the model 1917 rifle.

75. The following rules govern the carrying of the piece:

First. The piece is not carried with cartridges in either the chamber or the magazine except when specifically ordered. When so loaded, or supposed to be loaded, it is habitually carried locked; that is, with the safety lock turned to the "safe." At all other times it is carried unlocked, with the trigger pulled.

Second. Whenever troops are formed under arms, pieces are immediately inspected at the commands: 1. Inspection, 2. ARMS; 3. Order (Right shoulder, Port), 4. ARMS.

A similar inspection is made immediately before dismissal.

If cartridges are found in the chamber or magazine, they are removed and placed in the belt.

Third. The cut-off is kept turned "off" except when cartridges are actually used. (Applicable to troops armed with United States rifle, model 1903.)

Fourth. ~~The bayonet is not fixed except in bayonet exercise, on guard, for for combat.~~ *for Ceremony on 12 S.*

Fifth. Fall in is executed with the piece at the order arms. Fall out, rest, and at ease are executed as without arms. On resuming attention the position of order arms is taken.

Sixth. If at the order, unless otherwise prescribed, the piece is brought to the right shoulder at the command march, the three motions corresponding with the first three steps. Movements may be executed at the trail by prefacing the preparatory command with the words at trail; as, 1. At trail, forward, 2. MARCH; the trail is taken at the command march.

When the facings, alignments, open and close ranks, taking interval or distance, and assemblings are executed from the order, raise the piece to the trail while in motion and resume the order on halting.

Seventh. The piece is brought to the order on halting. The execution of the order begins when the halt is completed.

Eighth. A disengaged hand in double time is held as when without arms.

76. The following rules govern the execution of the manual of arms:

First. In all positions of the left hand at the balance (center of gravity, bayonet unfixed), the thumb clasps the piece; the sling is included in the grasp of the hand.

Second. In all positions of the piece "diagonally across the body," the position of the piece, left arm, and left hand are the same as in port arms.

Third. In resuming the order from any position in the manual, the motion next to the last concludes with the butt of the piece about 3 inches from the ground, barrel to the rear, the left hand above and near the right, steadying the piece, fingers extended and joined, forearm and wrist straight and inclining downward, all fingers of the right hand grasping the piece. To complete the order lower the piece gently to the ground with the right hand, drop the left quickly by the side, and take the position of order arms.

Allowing the piece to drop through the right hand to the ground, or other similar abuse of the rifle to produce effect in executing the manual, is prohibited.

Fourth. The cadence of the motions is that of quick time; the recruits are first required to give their whole attention to the details of the motions, the cadence being gradually acquired as they become accustomed to handling their pieces. The instructor may require them to count aloud in cadence with the motions.

Fifth. The manual is taught at a halt and the movements are, for the purpose of instruction, divided into motions and executed in detail; in this case the command of execution determines the prompt execution of the first motion, and the commands, **two, three, four**, that of the other motions.

To execute the movements in detail the instructor first cautions: **By the numbers**; all movements divided into motions are then executed as above explained until he cautions: **Without the numbers**; or commands movements other than those in the manual of arms.

Sixth. Whenever circumstances require the regular positions of the manual of arms and the firings may be ordered without regard to the previous position of the piece.

Under exceptional conditions of weather or fatigue the rifle may be carried in any manner directed.

77. Position of order arms standing: The butt rests evenly on the ground, barrel to the rear, toe of the butt on a line with toe of, and touching, the right shoe, arms and hands hanging naturally, right hand holding the piece between the thumb and fingers.

78. Being at order arms: 1. Present, 2. ARMS.

With the right hand, carry the piece in front of the center of the body, barrel to the rear and vertical, grasp it with the left hand at the balance, forearm horizontal and resting against the body. **(Two)** Grasp the small of the stock with the right hand.

79. Being at order arms: 1. Port, 2. ARMS.

With the right hand, raise and throw the piece diagonally across the body, grasp it smartly with both hands at the same time; the right, palm down, at the small of the stock; the left, palm up, at the balance; barrel up, sloping to the left and crossing opposite the junction of the neck with the left shoulder; right forearm horizontal; left forearm resting against the body; the piece in a vertical plane parallel to the front.

80. Being at present arms: 1. Port, 2. ARMS.

Carry the piece diagonally across the body and take the position of port arms.

81. Being at port arms: 1. Present, 2. ARMS.

Carry the piece to a vertical position in front of the center of the body and take the position of present arms.

82. Being at present or port arms: 1. Order, 2. ARMS.

Let go with the right hand; lower and carry the piece to the right with the left hand; regrasp it with the right hand just above the lower band; let go with the left hand, and take the next to the last position in coming to the order. **(TWO)** Complete the order.

83. Being at order arms: 1. Right shoulder, 2. ARMS.

With the right hand, raise and throw the piece diagonally across the body; carry the right hand quickly to the butt, embracing it, the heel between the first two fingers. **(TWO)** Without changing the grasp of the right hand place the piece on the right shoulder, barrel up and inclined at an angle of about 45° from the horizontal, trigger guard in the hollow of the shoulder, right elbow near the side, the piece in a vertical plane perpendicular to the front; carry the left hand, thumb and fingers extended and joined, to the small of the stock, tip of the forefinger touching the cocking piece, wrist straight and elbow down. **(THREE)** Drop the left hand by the side.

84. Being at right shoulder arms: 1. Order, 2. ARMS.

Press the butt down quickly and throw the piece diagonally across the body, the right hand retaining the grasp of the butt. **(TWO)**, **(THREE)** Execute order arms as described from port arms.

85. Being at port arms: 1. Right shoulder, 2. ARMS.

Change the right hand to the butt. **(TWO)**, **(THREE)** As in right shoulder arms from order arms.

86. Being at right shoulder arms: 1. Port, 2. ARMS.

Press the butt down quickly and throw the piece diagonally across the body, the right hand retaining its grasp of the butt. **(TWO)** Change the right hand to the small of stock.

87. Being at right shoulder arms: 1. Present, 2. ARMS.

Execute port arms. **(THREE)** Execute present arms.

88. Being at present arms: 1. Right shoulder, 2. ARMS.

Execute port arms. (TWO), (THREE), (FOUR) Execute right shoulder arms as from port arms.

89. Being at port arms: 1. Left shoulder, 2. ARMS.

Carry the piece with the right hand and place it on the left shoulder, barrel up, trigger guard in the hollow of the shoulder; at the same time grasp the butt with the left hand, heel between the first and second fingers, thumb and fingers closed on the stock. (TWO) Drop the right hand by the side.

Being at left shoulder arms: 1. Port, 2. ARMS.

Grasp the piece with the right hand at the small of the stock. (TWO) Carry the piece to the right with the right hand, regrasp it with the left, and take the position of port arms.

Left shoulder arms may be ordered directly from the order, right shoulder or present, or the reverse. At the command arms, execute port arms and continue in cadence to the position ordered.

90. Being at order arms: 1. Parade, 2. REST.

Carry the right foot 6 inches straight to the rear, left knee slightly bent; carry the muzzle in front of the center of the body, barrel to the left; grasp the piece with the left hand just below the stacking swivel, and with the right hand below and against the left.

Being at parade rest: 1. Squad, 2. ATTENTION.

Resume the order; the left hand quitting the piece opposite the right hip.

91. Being at order arms: 1. Trail, 2. ARMS.

Raise the piece, right arm slightly bent, and incline the muzzle forward so that the barrel makes an angle of about 30° with the vertical.

When it can be done without danger or inconvenience to others the piece may be grasped at the balance and the muzzle lowered until the piece is horizontal; a similar position in the left hand may be used.

92. Being at trail arms: 1. Order, 2. ARMS.

Lower the piece with the right hand and resume the order.

Rifle Salute.

93. Being at right shoulder arms: 1. Rifle, 2. SALUTE.

Carry the left hand smartly to the small of the stock, forearm horizontal, palm of hand down, thumb and fingers extended and joined, forefinger touching end of cocking piece; look toward the person saluted. (TWO) Drop left hand by the side; turn head and eyes to the front.

94. Being at order or trail arms: 1. Rifle, 2. SALUTE.

Carry the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forefinger against piece near the muzzle; look toward the person saluted. (TWO) Drop the left hand by the side; turn the head and eyes to the front.

The Bayonet.

95. Being at order arms: 1. Fix, 2. BAYONET.

If the bayonet scabbard is carried on the belt: Execute parade rest; grasp the bayonet with the right hand, back of hand toward the body; draw the bayonet from the scabbard and fix it on the barrel, glancing at the muzzle; resume the order.

If the bayonet is carried on the haversack: Draw the bayonet with the left hand and fix it in the most convenient manner.

96. Being at order arms: 1. Unfix, 2. BAYONET.

If the bayonet scabbard is carried on the belt: Execute parade rest; grasp the handle of the bayonet with the right hand, pressing the spring; raise the bayonet until the handle is about 12 inches above the muzzle of the piece; drop the point to the left, back of the hand toward the body, and glancing at the scabbard, return the bayonet, the blade passing between the left arm and the body; regrab the piece with the right hand and resume the order.

If the bayonet scabbard is carried on the haversack: Take the bayonet from the rifle with the left hand and return it to the scabbard in the most convenient manner.

If marching or lying down, the bayonet is fixed and unfixed in the most expeditious and convenient manner and the piece returned to the original position.

Fix and unfix bayonet are executed with promptness and regularity but not in cadence.

97. CHARGE BAYONET. Whether executed at halt or in motion. The bayonet is held toward the opponent as in the position of guard in the Bayonet Manual.

Exercises for instruction in bayonet combat are prescribed in the Bayonet Manual.

The Inspection.

98. Being at order arms: 1. Inspection, 2. ARMS.

At the second command, take the position of port arms. (TWO) Seize the bolt handle with the thumb and forefinger of the right hand, turn the handle up, draw the bolt back, and glance at the chamber. Having found the chamber empty, or having emptied it, raise the head and eyes to the front.

99. Being at inspection arms: 1. Order (Right shoulder, Port), 2. ARMS.

At the preparatory command, push the bolt forward, turn the handle down, pull the trigger, and resume port arms. At the command arms, complete the movement ordered.

To Dismiss the Squad.

100. Being at halt: 1. Inspection, 2. ARMS, 3. Port, 4. ARMS, 5. DISMISSED.

SCHOOL OF THE SQUAD.

101. Soldiers are grouped into squads for purposes of instruction, discipline, control, and order.

102. The squad proper consists of a corporal and seven privates.

The movements in the School of the Squad are designed to make the squad a fixed unit and to facilitate the control and movement of the company. If the number of men grouped is more than 3 and less than 12, they are formed as a squad of 4 files, the excess above 8 being posted as file closers. If the number grouped is greater than 11, two or more squads are formed, and the group is termed a section or platoon.

For the instruction of recruits, these rules may be modified.

103. The corporal is the squad leader, and when absent, is replaced by a designated first-class private. If no designation is made, the senior first-class private acts as leader.

The corporal, when in ranks, is posted as the left man in the front rank of the squad.

When the corporal leaves the ranks to lead his squad, his rear-rank man steps into the front rank, and the file remains blank until the corporal returns to his place in ranks, when his rear-rank man steps back into the rear rank.

104. In battle, officers, sergeants, and section guides endeavor to preserve the integrity of squads. They designate new leaders to replace those disabled, organize new squads when necessary, and see that every man is placed in a squad.

Men are taught the necessity of remaining with the squad to which they belong, and in case it be broken up or they become separated therefrom, to attach themselves to the nearest squad and section or platoon leaders, whether these be of their own or of another organization.

105. The squad executes the halt, rests, facings, steps, and marchings, and the manual of arms as explained in the School of the Soldier.

ORGANIZATION OF THE SQUAD.

106. The squad consists of one corporal, six riflemen, and one autorifleman. One rifleman is equipped with a grenade discharger. One rifleman carries extra ammunition for the automatic rifle and serves as replacement for the autorifleman. All riflemen carry a certain supply of extra ammunition for the automatic rifle, and when necessary, rifle and hand grenades.

The general training of the members of the squad will be uniform. All men will be trained in the use of the rifle and automatic rifle. Training in the use of grenades will be supplementary to training with the rifle and the automatic rifle.

To form the squad, the instructor places himself 3 paces in front of where the center is to be and commands: **FALL IN.**

The men assemble at attention, pieces at the order, and are arranged by the corporal in double rank, as nearly as practicable in order of height from right to left, each man dropping his left hand as soon as the man on his left has his interval. The rear rank forms with distance of 40 inches. The men on the left of the squad (left file) do not bring up their arms unless the squad is part of a larger unit.

The instructor then commands: **COUNT OFF.**

At this command all except the right file execute eyes right, and, beginning on the right, the men in each rank count, one, two; three, four; each man turns his head and eyes to the front as he counts.

Pieces are then inspected.

As soon as its organization has been permanently fixed, the squad forms as follows: Nos. 1 front and rear rank, No. 2 rear rank, No. 4 rear rank, riflemen; No. 2 front rank, rifleman with grenade discharger; No. 3 rear rank, autorifleman; No. 3 front rank, substitute autorifleman and carrier; No. 4 front rank, corporal.

ALIGNMENTS.

107. To align the squad, the base file or files having been established: 1. **Right (Left)**, 2. **DRESS**, 3. **FRONT**.

At the command dress, all men place the left hand upon the hip (whether dressing to the right or left), fingers and thumb pointing downward, thumb to the front; each man, except the base file, when on or near the new line executes eyes right, and taking steps of 2 or 3 inches, places himself so that his right arm rests lightly against the arm of the man on his right, and so that his eyes and shoulders are in line with those of the men on his right. The rear-rank men cover in file.

The instructor verifies the alignment of both ranks from the right flank and orders up or back such men as may be in rear, or in advance, of the line; only the men designated move.

At the command front, given when the ranks are aligned, each man turns his head and eyes smartly to the front and drops his left hand quickly by his side.

Whenever the position of the base file or files necessitates a considerable movement by the squad, such movement will be executed by marching to the front or oblique, to the flank or backward, as the case may be, without other command, and at the trail.

108. To preserve the alignment when marching: **GUIDE RIGHT (LEFT).**

The men preserve their intervals from the side of the guide, yielding to pressure from that side and resisting pressure from the opposite direction. They recover intervals, if lost, by gradually opening out or closing in; they recover alignment by slightly lengthening or shortening the steps. The rear-rank men cover their file leaders at 40 inches.

In double rank, the front-rank man on the right, or designated flank, conducts the march. When marching faced to the flank, the leading man of the front rank is the guide.

TO TAKE INTERVALS AND DISTANCES.

109. Being in line at a halt: 1. Take interval, 2. To the right (left), 3. **MARCH**, 4. Squad, 5. **HALT**.

At the second command, the rear-rank men march backward 4 steps and halt. At the command march, all face to the right and the leading man of each rank steps off; the other men step off in succession, each following the preceding men at 4 paces, rear-rank men marching abreast of their file leaders.

At the command halt, given when all have their intervals, all halt and face to the front.

110. Being at intervals, to assemble the squad: 1. Assemble to the right (left), 2. **MARCH**.

The front-rank man on the right stands fast, the rear-rank man on the right closes to 40 inches. The other men face to the right, close by the shortest line, and face to the front. Each man, upon arriving on the line, brings up his left arm as in forming the squad.

111. Being in line at a halt and having counted off: 1. Take distance, 2. **MARCH**, 3. Squad, 4. **HALT**.

At the command march, No. 1 of the front rank moves straight to the front; Nos. 2, 3, and 4 of the front rank, and Nos. 1, 2, 3, and 4 of the rear rank, in the order named, move

straight to the front, each stepping off so as to follow the preceding man at 4 paces. The command halt is given when all have their distances.

In case more than one squad is in line, each squad executes the movement as above. The guide of each rank of numbers is right.

112. Being at distances, to assemble the squad: 1. **Assemble**, 2. **MARCH**.

No. 1 of the front rank stands fast; the other numbers move forward to their proper places in line. Each man, upon arriving on the line, brings up his left arm as in forming the squad.

TO STACK AND TAKE ARMS.

113. Being in line at a halt: **STACK ARMS**.

Each even number of the front rank grasps his piece with the left hand at the upper band and rests the butt between his feet, barrel to the front, muzzle inclined slightly to the front and opposite the center of the interval on his right, the thumb and forefinger raising the stacking swivel. Each even number of the rear rank then passes his piece, barrel to the rear, to his file leader, who grasps it between the bands with his right hand and throws the butt about 2 feet in advance of that of his own piece and opposite the right of the interval, the right hand slipping to the upper band, the thumb and forefinger raising the stacking swivel, which he engages with that of his own piece. Each odd number of the front rank raises his piece with the right hand, carries it well forward, barrel to the front; the left hand, guiding the stacking swivel, engages the lower hook of the swivel of his own piece with the free hook of that of the even number of the rear rank; he then turns the barrel outward into the angle formed by the other two pieces and lowers the butt to the ground, to the right of, and against, the toe of his right shoe.

The stacks made, the loose pieces are laid on them by the even numbers of the front rank.

When each man has finished handling pieces, he takes position of the soldier.

114. Being in line behind the stacks: **TAKE ARMS**.

The loose pieces are returned by the even numbers of the front rank. Each even number of the front rank grasps his own piece with the left hand, the piece of his rear-rank man with his right hand, grasping both between the bands; each odd number of the front rank grasps his piece in the same way with the right hand, disengages it by raising the butt from the ground, and then, turning the piece to the right, detaches it from the stack.

Each even number of the front rank then disengages and detaches his piece by turning it to the left, and passes the piece of his rear-rank man to him, and all resume the order.

115. Should any squad have Nos. 2 and 3 blank files, No. 1 rear rank takes the place of No. 2 rear rank in making and breaking the stack. After the stacks are made or broken, he resumes his post.

Pieces not used in making the stack are termed loose pieces.

Pieces are never stacked with the bayonet fixed.

THE OBLIQUE MARCH.

116. For the instruction of recruits, the squad being in column or correctly aligned, the instructor causes the squad to face half right or half left, points out to the men their relative positions, and explains that these are to be maintained in the oblique march.

117. 1. Right (left) oblique, 2. MARCH.

Each man steps off in a direction 45° to the right of his original front. He preserves his relative position, keeping his shoulders parallel to those of the guide (the man on the right front of the line or column), and so regulates his step that the ranks remain parallel to their original front.

At the command halt, the men halt faced to the front. It is best to give the command halt on the left foot when halting from a right oblique, and on the right foot when halting from a left oblique.

To resume the original direction: 1. Forward, 2. MARCH.

The men half face to the left in marching and then move straight to the front.

If at half step or mark time while obliquing, the oblique march is resumed by the commands: 1. Oblique, 2. MARCH.

TO TURN ON MOVING PIVOT.

118. Being in line: 1. Right (left) turn, 2. MARCH.

The movement is executed by each rank successively and on the same ground. At the second command, the pivot man of the front rank faces to the right in marching and takes the half step. The other men of the rank oblique to the right until opposite their places in line, then execute a second right oblique, and take the half step on arriving abreast of the pivot man. All glance toward the marching flank while at half step and take the full step without command as the last man arrives on the line.

Right (left) half turn is executed in a similar manner. The pivot man makes a half change of direction to the right and the other men make quarter changes in obliquing.

TO TURN ON FIXED PIVOT.

119. Being in line, to turn and march: 1. Squad right (left), 2. MARCH.

At the second command, the right-flank man in the front rank faces to the right in marching and marks time. The other front-rank men oblique to the right, place themselves abreast of the pivot, and mark time. In the rear rank, the third man from the right, followed in column by the second and first moves straight to the front until in rear of his front-rank man, when all face to the right in marching and mark time. The other number of the rear rank moves straight to the front four paces and places himself abreast of the man on his right. Men on the new line glance toward the marching flank while marking time, and as the last man arrives on the line, both ranks execute forward, march, without command.

120. Being in line, to turn and halt: 1. Squad right (left), 2. MARCH, 3. Squad, 4. HALT.

The third command is given immediately after the second. The turn is executed as prescribed in the preceding paragraph, except that all men, on arriving on the new line, mark time until the fourth command is given, when all halt. The fourth command should be given as the last man arrives on the line.

121. Being in line, to turn about and march: 1. Squad right (left) about, 2. MARCH.

At the second command, the front rank twice executes squad right, initiating the second squad right when the man on the marching flank has arrived abreast of the rank. In the rear rank, the third man from the right, followed by the second and first in column, moves straight to the front until on the prolongation of the line to be occupied by the rear rank; changes direction to the right; moves in the new direction until in rear of his front-rank man, when all face to the right in marching, mark time, and glance toward the marching flank. The fourth man marches on the left of the third to his new position; as he arrives on the line, both ranks execute forward, march, without command.

122. Being in line, to turn about and halt: 1. Squad right (left) about, 2. MARCH, 3. Squad, 4. HALT.

The third command is given immediately after the second. The turn is executed as prescribed in the preceding paragraph except that all men, on arriving on the new line, mark time until

the fourth command is given, when all halt. The fourth command should be given as the last man arrives on the line.

TO FOLLOW THE CORPORAL.

123. Being assembled or deployed, to march the squad without unnecessary commands, the corporal places himself in front of it and commands: **FOLLOW ME.**

If in line or skirmish line, No. 2 of the front rank follows in the trace of the corporal at about 3 paces; the other men conform to the movements of No. 2, guiding on him and maintaining their relative positions.

If in column, the head of the column follows the corporal.

TO DEPLOY AS SKIRMISHERS.

124. Being in any formation, assembled: 1. As skirmishers, 2. **MARCH.**

The corporal places himself in front of the squad, if not already there. Moving at a run, the men place themselves abreast of the corporal at 5-pace intervals, Nos. 1 and 2 on his right, Nos. 3 and 4 on his left, rear-rank men on the right of their file leaders, extra men on the left of No. 4; all then conform to the corporal's gait.

When the squad is acting alone, skirmish line is similarly formed on No. 2 of the front rank, who stands fast or continues the march, as the case may be; the corporal places himself in front of the squad when advancing and in rear when halted.

When deployed as skirmishers, the men march at ease, pieces at the trail unless otherwise ordered.

The corporal is the guide when in the line; otherwise, No. 2 front rank is the guide.

125. The normal interval between skirmishers is 5 paces. The front of a squad thus deployed as skirmishers is about 40 yards.

TO INCREASE OR DIMINISH INTERVALS.

126. If assembled, and it is desired to deploy at other than the normal interval; or if deployed, and it is desired to increase or decrease the interval: 1. As skirmishers (so many), paces, 2. **MARCH.**

Intervals are taken at the indicated number of paces. If already deployed, the men move by the flank toward or away from the guide.

THE ASSEMBLY.

127. Being deployed: 1. Assemble, 2. MARCH.

The men move toward the corporal in double time and form in their proper places.

If the corporal continues to advance, the squad follows him at 3 paces.

The assembly while marching to the rear is not executed.

KNEELING AND LYING DOWN.

128. If standing: **KNEEL.**

Half face to the right; carry the right toe about 1 foot to the left rear of the left heel; kneel on right knee, sitting as nearly as possible on the right heel; left forearm across left thigh; piece remains in position of order arms, right hand grasping it above the lower band.

129. If standing or kneeling: **LIE DOWN.**

Kneel, but with right knee against left heel; carry back the left foot and lie flat on the belly, inclining body about 35° to the right; piece horizontal, barrel up, muzzle off the ground and pointed to the front; elbows on the ground; left hand at the balance, right hand grasping the small of the stock opposite the neck. This is the position of order arms, lying down.

130. If kneeling or lying down: **RISE.**

If kneeling, stand up, faced to the front, on the ground marked by the left heel.

If lying down, raise body on both knees; stand up, faced to the front, on the ground marked by the knees.

131. If lying down: **KNEEL.**

Raise the body on both knees; take the position of kneel.

132. In double rank, the positions of kneeling and lying down are ordinarily used only for the better utilization of cover.

When deployed as skirmishers, a sitting position may be taken in lieu of the position kneeling.

LOADINGS AND FIRINGS.

133. The commands for loading and firing are the same whether standing, kneeling, or lying down.

When kneeling or lying down in double rank, the rear rank does not load, aim, or fire.

The instruction in firing will be preceded by a command for loading.

Loadings are executed in line and skirmish line only.

134. Rifles having been ordered loaded are kept loaded without command until the command unload, or inspection arms, fresh clips being inserted when the magazine is exhausted.

135. The aiming point or target is carefully pointed out. This may be done before or after announcing the sight setting. Both are indicated before giving the command for firing. The designation of the target may be omitted when the target appears suddenly and is unmistakable, but the range must always be announced, the command battlesight being given when it is not desired to have the sights set.

The command for range serves as a preparatory command for firing; it insures the simultaneous opening of fire and the full effect of surprise.

136. The target or aiming point having been designated, such designation need not be repeated until a change is necessary.

Troops are trained to continue their fire upon the aiming point or target designated until a change is ordered.

137. If the men are not already in the position of load, that position is taken at the announcement of the range. Skirmishers not in a firing position, either at a halt or in movement, take such position at the command announcing the range.

138. The use of the sling as an aid to accurate firing is desirable at all ranges and is absolutely essential at ranges greater than 300 yards.

To Load.

139. Being in line or skirmish line at halt: 1. With dummy (blank or ball) cartridges, 2. **LOAD.**

At the command load, each front-rank rifleman or skirmisher faces half right and carries the right foot to the right, about 1 foot, to such position as will insure the greatest firmness and steadiness of the body; raises, or lowers, the piece and drops it into the left hand at the balance, left thumb extended along the stock, muzzle at the height of the breast, and if armed with the model 1903 rifle, turns the cut-off up. With the right hand he turns and draws the bolt back, takes a loaded clip and inserts the end in the clip slots, places the thumb on the powder space of the top cartridge, the fingers extending around the piece and tips resting on the magazine floor plate; forces the cartridges into the magazine by pressing down with the thumb; without removing the clip thrusts the bolt home, turning down the handle; turns the safety lock to the "safe" and carries the hand to the small of the stock. Each rear-rank rifleman moves to the right front, takes a similar position opposite the interval to the right of his front-rank man, muzzle of the piece extending

beyond the front rank, and loads. Auto riflemen do not execute the loadings or firings in line.

A skirmish line may load while moving, the pieces being held as nearly as practicable in the position of load.

If kneeling or sitting, the position of the piece is similar. If kneeling, the left forearm rests on the left thigh. If sitting, the elbows are supported by the knees. If lying down, the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.

For reference these positions (standing, kneeling, and lying down) are designated as that of load.

140. For instruction in loading: 1. Simulate, 2. LOAD.

Executed as above described except that the cut-off (model 1903 rifle) remains "off" and the handling of cartridges is simulated.

The recruits are first taught to simulate loading and firing; after a few lessons, dummy cartridges may be used. Later, blank cartridges may be used.

141. The model 1903 rifle may be used as a single loader by turning the magazine "off." The magazine may be filled in whole or in part while "off" or "on" by pressing cartridges singly down and back until they are in the proper place. The use of the rifle as a single loader is, however, to be regarded as exceptional.

The model 1917 rifle can not be used as a single loader.

To Unload.

142. UNLOAD.

Take the position of load, turn the safety lock (model 1903 rifle) up (if armed with the model 1917 rifle, turn the safety lock to the front) and move bolt alternately back and forward until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed by first thrusting the bolt slightly forward to free it from the stud holding it in place when the chamber is open, pressing the follower down and back to engage it under the bolt, and then thrusting the bolt home; the trigger is pulled. The cartridges are then picked up, cleaned, and returned to the belt, and the piece is brought to the order.

To Set the Sight.

143. RANGE, ELEVEN HUNDRED (EIGHT FIFTY, etc.) or BATTLE SIGHT or SAME RANGE.

The sight is set at the elevation indicated. The instructor explains and verifies sight settings.

To Fire by Volley.

144. 1. READY, 2. AIM, 3. Squad, 4. FIRE.

At the command ready, turn the safety lock to the "ready"; at the command aim, raise the rifle with both hands and support the butt firmly against the hollow of the right shoulder, right thumb clasping the stock, barrel horizontal, left elbow well under the piece, right elbow as high as the shoulder. Incline the head slightly forward and a little to the right, cheek against the stock, left eye closed, right eye looking through the notch of the rear sight so as to perceive the object aimed at, second joint of forefinger resting lightly against the front of the trigger and taking up the slack; top of front sight is carefully raised into, and held in, the line of sight.

Each rear-rank man aims through the interval to the right of his file leader and leans slightly forward to advance the muzzle of his piece beyond the front rank.

In aiming kneeling, the left elbow rests on the left knee, point of elbow in front of kneecap. In aiming sitting, the elbows are supported by the knees.

In aiming lying down raise the piece with both hands, rest on both elbows, and press the butt firmly against the right shoulder.

At the command fire, press the finger against the trigger; fire without deranging the aim and without lowering or turning the piece; lower the piece in the position of Load and load.

145. To continue the firing: 1. AIM, 2. Squad, 3. FIRE.

Each command is executed as previously explained. Load (from magazine) is executed by drawing back and thrusting home the bolt with the right hand, leaving the safety lock at the "ready."

To Fire at Will.

146. 1. FIRE AT WILL.

Each man, independently of the others, comes to the ready, aims carefully and deliberately at the aiming point or target, fires, loads, and continues the firing until ordered to suspend or cease firing.

To fire by clip: **CLIP FIRE.**

Executed in the same manner as fire at will, except that each man, after having exhausted the cartridges then in the piece, suspends firing.

147. To increase (decrease) the rate of fire in progress, the instructor shouts: FASTER (SLOWER).

The rate of fire is dependent on the training of the individual. It must not be so great as to preclude accurate aim or proper trigger squeeze.

Men are trained to fire at the rate of about three shots per minute at mid ranges and five or six at close ranges, devoting the minimum of time to loading and the maximum to deliberate aiming. To illustrate the necessity for deliberation and to habituate men to combat conditions, small and comparatively indistinct targets are designated.

To Suspend Firing.

148. The instructor blows a long blast of the whistle and repeats same, if necessary, or commands: **SUSPEND FIRING.**

Firing stops; pieces are held, loaded and locked, in a position of readiness for instant resumption of firing, rear sights unchanged. The men continue to observe the target or aiming point, or the place at which the target disappeared, or at which it is expected to reappear.

This whistle signal may be used as a preliminary to cease firing.

To Cease Firing.

149. CEASE FIRING.

Firing stops; pieces not already there are brought to the position of load; those not loaded, are loaded; sights are laid; pieces are locked and brought to the order.

Cease firing is used for long pauses, to prepare for changes of position or to steady the men.

150. Commands for suspending or ceasing fire may be given at any time after the preparatory command for firing whether the firing has actually commenced or not.

INSTRUCTION OF THE SKIRMISHER.

151. The instruction of the recruit in the use of the rifle should begin at an early period in his training. It should be impressed on him that the rifle is his principal weapon and that the object of all movement is to place him at such point that he can make effective use of it.

The Use of Cover.

152. The skirmisher should be given careful instruction in the individual use of cover.

It should be impressed upon him that, in taking advantage of natural cover, he must be able to fire easily and effectively upon the enemy. If advancing on an enemy, he must do so steadily and as rapidly as possible. He must conceal himself as much as possible while firing and while advancing. While setting his sight, he should be under cover or lying prone.

153. To teach him to fire easily and effectively, at the same time concealing himself from the view of the enemy, he is practiced in simulated firing in the prone, sitting, kneeling, and crouching positions, from behind hillocks, trees, heaps of earth or rocks, from depressions, gullies, ditches, doorways, or windows. He is taught to fire around the right side of his concealment whenever possible, or, when this is not possible, to rise enough to fire over the top of his concealment. He is taught to improve natural cover and adapt it as a firing position by the use of the intrenching tool.

When these details are understood, he is required to select cover with reference to an assumed enemy and to place himself behind it in proper position for firing. Rapid loading, rapid and accurate sight setting, and quick and skillful occupation of the firing position are practiced.

The skirmisher should be instructed in the value of the different forms of cover as protection from both terrestrial and aerial view and from high-angle infantry and artillery fire.

154. The evil of remaining too long in one place, however good the concealment, should be explained. He should be taught to advance from cover to cover, selecting cover in advance before leaving his concealment.

It should be impressed upon him that a man running rapidly toward an enemy furnishes a poor target. He should be trained in springing from a prone position behind concealment, running at top speed to cover, and throwing himself behind it. He should also be practiced in advancing from cover to cover by crawling or by lying on the left side, rifle grasped in the right hand, and pushing himself forward with the right leg.

He should be instructed in moving on designated direction points, making use of cover to screen his movements without losing the direction of advance.

155. He should be taught that when fired on while acting independently he should drop to the ground, seek cover, and then endeavor to locate his enemy.

156. The instruction of the skirmisher in the use of cover is continued in the combat exercises of the platoon, but he must then be taught that the proper advance of the platoon and the effectiveness of its fire are of greater importance than the question of cover for individuals.

Observation.

157. The ability to use his eyes accurately is of great importance to the soldier. The recruit should be trained in observing his surroundings from positions and when on the march.

He should be practiced in pointing out and naming military features of the ground, in distinguishing between living beings, in counting distant groups of objects or beings, in recognizing colors and forms, and in the varying visibility of targets as affected by background and light.

158. In the training of men in the mechanism of the firing line, they should be practiced in repeating to one another target and aiming point designations and in quickly locating and pointing out a designated target. They should be taught to distinguish from a prone position distant objects, particularly troops, both with the naked eye and with field glasses. Similarly they should be trained in estimating distances.

Night Movements.

159. Movements at night or in heavy fog require especial practice. Order, silence, and skill in maintaining direction are the principal requisites. Practice should be had in accustoming the eye and ear to the different impressions which objects and sounds make under night conditions. Estimation of distance by eye and of direction and distance of sounds should be practiced. Exercises should be conducted in orientation by means of objects whose location has been observed during the day, by the stars, and by the use of the compass. The soldier should be instructed as to the conduct to be observed in case the enemy sets up flares in his vicinity. He must be taught to secure his arms and equipment so that they make no noise.

By the use of colored glasses night conditions may be simulated during daylight hours; this procedure has the advantage that it permits the instructor to observe closely the movements of the men under instruction.

160. The soldier should be instructed in the passage of obstacles, wire cutting, and the laying out of panels.

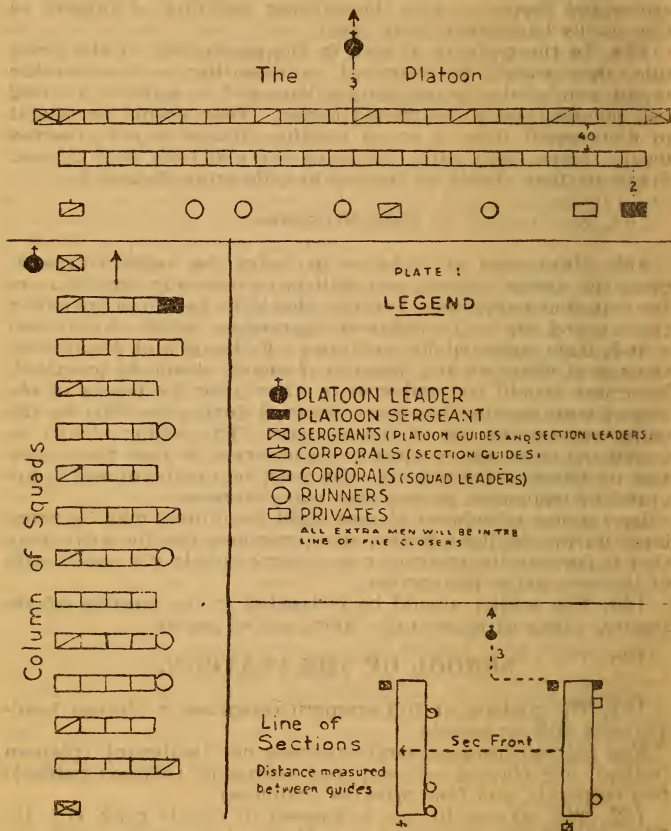
SCHOOL OF THE PLATOON.

161. The platoon at full strength comprises a platoon headquarters and six squads.

The platoon headquarters comprises one lieutenant (platoon leader), one platoon sergeant, two sergeants (platoon guides), two corporals, and four privates (runners).

162. The platoon in line is formed in double rank (Pl. 1). It is divided into squads of four files each, beginning with the right flank. Platoons of more than three squads are divided into two sections. If the number of squads in the platoon is even, the sections comprise an equal number of squads; if the number of squads is odd, the right section is the stronger.

The two sergeants of platoon headquarters (platoon guides) act as section leaders, the two corporals as section guides.



163. In each platoon, men are arranged as far as practicable according to height from right to left, the tallest on the right. Departures from this rule are authorized for the purpose of

assigning men to the duties which they are best fitted to perform, and in order to maintain the integrity of squads. If any squad contains less than six men, it is either increased to that number by transfers from other squads or from the privates in the file closers, or is broken up and its members assigned to other squads and posted in the line of file closers. These squad organizations are maintained, by transfers if necessary, until the platoon becomes so reduced in numbers as to necessitate a new division into squads. No squad will contain less than six men.

For purposes of formation or drill the runners may be used to fill blank files.

164. Sections and squads are numbered consecutively from right to left in each platoon, and these designations do not change. For convenience in giving commands and for reference, the designations right, center, and left when in line and leading, center, rear, when in column are applied to the actual right, center, left, leading or rear section or squad.

165. The formations of the platoon are: Line, line of sections, and columns of squads, twos or files. The principal close-order formations are the line and the column of squads. The line of sections is a formation taken preparatory to deployment or for purposes of the approach march.

166. Section drills will be held for the purpose of giving section leaders an opportunity to command their sections.

167. When the platoon is marching on roads or trails, the file closers take position at the head or rear of the columns as directed by the platoon leader.

CLOSE ORDER.

Rules.

168. The platoon executes the halt, rests, facings, steps, and marchings, manual of arms, loadings and firings, takes intervals and distances and assembles, increases and diminishes intervals, resumes attention, obliques, resumes the direct march, preserves alignments, kneels, lies down, rises, stacks and takes arms, as explained in the Schools of the Soldier and the Squad, substituting in the commands **platoon** for **squad**.

The same rule applies to sections, detachments, details, etc., substituting their designation for **squad** in the commands. In the same manner, these execute the movements prescribed for the platoon whenever possible, substituting their designations for **platoon** in the commands.

169. A platoon of less than four squads is led by the platoon leader as a single section, but retains the designation of **platoon**.

The sergeants assist in fire control; the other file closers place themselves in the skirmish line.

170. In section movements, the post of the section guide is at the rear of the section.

171. The guides of a column of squads place themselves on the flank opposite the file closers. To change the guides and file closers to the other flank, the platoon leader commands:

1. File closers on left (right) flank, 2. **MARCH**. The file closers dart through the column; the platoon leader and guides change to the other flank.

In column of squads, each rank preserves the alignment toward the side of the guide.

172. Men in the line of file closers do not execute the loadings or firings.

Guides and enlisted men in the line of file closers execute the manual of arms during the drill unless specially excused, when they remain at the order. During ceremonies they execute all movements. Men armed with the automatic rifle do not execute the manual of arms at either drills or ceremonies.

173. In taking intervals and distances, unless otherwise directed, the right and left guides, at the first command, place themselves in the line of file closers, and with them, take a distance of 4 paces from the rear rank. In taking intervals, at the command **march**, the file closers face to the flank, and each steps off with the file nearest him. In assembling, the guides and file closers resume their positions in line.

174. In movements executed simultaneously by sections (as sections, column right), section leaders repeat the preparatory command (column right, etc.), applicable to their respective sections. The command of execution is given by the platoon leader only.

Alignments.

175. The alignments are executed as prescribed in the School of the Squad, the guide being established instead of the flank file. The rear-rank man of the flank file keeps his head and eyes to the front and covers his file leader.

At each alignment the platoon leader places himself in prolongation of the line 2 paces from and facing the flank toward which the dress is made, verifies the alignment, and commands **FRONT**. The rear-rank man and the guide on the flank away from the direction of dress, do not bring up their arms.

Line.

176. Being in line, to turn the platoon: 1. Platoon right (left), 2. **MARCH**, 3. Platoon, 4. **HALT**; or, 3. Forward, 4. **MARCH**.

At the second command the right-flank man in the front rank faces to the right in marching and marks time; the other front-rank men oblique to the right, place themselves abreast of the pivot, and mark time. In the rear rank the third man from the right, followed in column by the second and first, moves straight to the front until in rear of his front-rank man when all face to the right in marching and mark time; the remaining men of the rear rank move straight to the front 4 paces, oblique to the right, place themselves abreast of the third man, cover their file leaders, and mark time. The right guide steps back, takes post on the flank, and marks time.

The fourth command is given when the last man arrives on the line.

The command halt may be given at any time after the movement begins; only those halt who are in the new position. Each of the others halts upon arriving on the line, aligns himself to the right, and executes front without command.

177. Being in line, to change direction: 1. Right (left) turn, 2. MARCH, 3. Forward, 4. MARCH.

Executed as described in the School of the Squad, except that the men do not glance toward the marching flank and that all take the full step at the fourth command. The right guide is the pivot of the front rank. Each rear-rank man obliques on the same ground as his file leader.

178. Being in line, to form column of squads:

1. Squads right (left), 2. MARCH; or, 1. Squads right (left), 2. MARCH, 3. Platoon, 4. HALT.

Executed by each squad as prescribed in the School of the Squad.

The file closers take posts on the pivot flank, abreast of and 4 inches from the nearest rank.

179. Being in line, to form column of squads and change direction: 1. Squads right (left), column left (right), 2. MARCH; or, 1. Right (left) by squads, 2. MARCH.

In the first case, the right squad initiates column left as soon as it has completed the squad right.

In the second case, at the command march, the right squad marches forward; the remainder of the platoon executes squads right, column left, and follows the right squad. The right guide, when he has posted himself in front of the right squad, takes four short steps, then resumes the full step; the right squad conforms.

Column of Squads.

180. Being in column of squads, to change direction: 1. Column right (left), 2. MARCH.

At the second command, the front rank of the leading squad turns to the right on moving pivot as in the School of the Squad; the other ranks, without command, turn successively on the same ground and in a similar manner.

181. Being in column of squads, to form line to the front: 1. Right (left) front into line, 2. **MARCH**, 3. Platoon, 4. **HALT**, 5. **FRONT**.

At the second command, the leading squad moves straight forward; the rear squads execute right oblique.

The command halt is given when the leading squad has advanced the desired distance; it halts; its leader then commands: **Left dress**. Each of the rear squads, when opposite its place in line, resumes the original direction at the command of its leader. Each is halted on the line at the command of its leader, who then commands: **Left dress**. All dress on the first squad in line.

182. Being in column of squads, to form line to a flank: 1. Squads right (left), 2. **MARCH**.

Executed by each squad as described in the School of the Squad.

If the platoon be formed in line toward the side of the file closers, they dart through the column and take posts in rear of the platoon at the second command.

183. Being in column of squads, to form line on right or left: 1. On right (left) into line, 2. **MARCH**, 3. Platoon, 4. **HALT**, 5. **FRONT**.

At the first command, the leader of the leading squad commands: **Right turn**. The leaders of the other squads command: **Forward**, if at a halt. At the second command, the leading squad turns to the right on moving pivot. The command halt is given when the leading squad has advanced the desired distance in the new direction. It halts; its leader then commands: **Right dress**.

The squads in rear continue to march straight to the front; each, when opposite the right of its place in line, executes right turn at the command of its leader. Each is halted on the line at the command of its leader, who then commands: **Right dress**. All dress on the first squad in line.

If executed in double time, the leading squad marches in double time until halted.

184. Being in column of squads, to form line of sections to the right (left): 1. Sections, column right (left), 2. **MARCH**.

Executed by each section as described for the platoon.

185. Being in column of squads, to form line of sections to the front: 1. Line of sections (so many paces), 2. Right (left), 3. **MARCH**, 4. Platoon, 5. **HALT**.

At the third command, the leading section moves straight to the front or in the direction indicated by the platoon leader; it halts at the fifth command. The rear section is conducted in column of squads on the indicated flank and halted at the prescribed interval abreast of the leading section; if no interval be indicated in the command, it forms at section frontage from the leading section.

Line of Sections.

186. Being in line of sections, to change direction: 1. Platoon right (left), 2. **MARCH**, 3. Platoon, 4. **HALT**.

The right section changes direction to the right; the other section is conducted by the shortest line to its place abreast of the right section.

The fourth command is given when the right section has advanced the desired distance in the new direction; that section halts; the other section halts upon arriving on the line.

187. Being in line of sections, to form column of squads to the front: 1. Column of squads, First (Second) Section, forward, 2. **MARCH**.

The indicated section moves forward; the other section is conducted by its leader in rear of the indicated section.

188. Being in line of sections, to form column of squads to a flank: 1. Sections, column right, 2. **MARCH**.

Executed by each section as prescribed for the platoon.

Facing or Marching to the Rear.

189. Being in line, line of sections, or column of squads, to face or march to the rear: 1. Squads right (left) about, 2. **MARCH**; or. 1. Squads right (left) about, 2. **MARCH**, 3. Platoon, 4. **HALT**.

Executed by each squad as described in the School of the Squad.

If the platoon or section be in column of squads, the file closers turn about toward the column and take their posts; if the platoon be in line, each darts through the nearest interval between squads.

190. To march to the rear for a few paces: 1. **About**, 2. **FACE**, 3. **Forward**, 4. **MARCH**.

If in line, the guides place themselves in the rear rank, now the front rank; the file closers, on facing about, maintain their relative positions. No other movement is executed until the line is faced to the original front.

At Ease and Route Step.

191. The column of squads is the habitual column of route, but route step and at ease are applicable to any marching formation.

192. To march in route step: 1. Route step, 2. **MARCH.**

The men carry their pieces at will, keeping the muzzles elevated; they are not required to preserve silence nor to keep the step. The ranks cover and preserve their distance. If halted from route step, the men stand at rest.

193. To march at ease: 1. At ease, 2. **MARCH.**

The platoon marches as in route step, except that silence is preserved; when halted, the men remain at ease.

194. Marching in route step or at ease: 1. Platoon, 2. **ATTENTION.**

At the command **attention**, the pieces are brought to the right shoulder and the cadenced step in quick time is resumed.

To Diminish the Front of a Column of Squads.

195. Being in column of squads: 1. Right (left) by twos, 2. **MARCH.**

At the command **march**, all files except the two right files of the leading squad execute in place halt; the two left files of the leading squad oblique to the right when disengaged and follow the right files at the shortest practicable distance. The remaining squads follow successively in like manner.

196. Being in column of squads or twos: 1. Right (left) by file, 2. **MARCH.**

At the command **march**, all files execute in place halt except the right file of the leading two or squad. The left file or files of the leading two or squad oblique successively to the right when disengaged, and each follows the file on its right at the shortest practicable distance. The remaining twos or squads follow successively in like manner.

197. Being in column of files or twos, to form column of squads; or, being in column of files, to form column of twos: 1. Squads (Twos), right (left) front into line, 2. **MARCH.**

At the command **march**, the leading file or files halt. The remainder of the squad, or two, obliques to the right and halts on line with the leading file or files. The remaining squads or twos close up and successively form in rear of the first in like manner.

The movement described in this paragraph will be ordered right or left, so as to restore the files to their normal relative positions in the two or squad.

198. The movements prescribed in the three preceding paragraphs are difficult of execution at attention and have no value as disciplinary exercises.

199. Marching by twos or files can not be executed without serious delay and waste of road space. Every reasonable precaution will be taken to obviate the necessity for these formations in route columns. They find their principal application as approach formations in the zone of hostile artillery fire.

EXTENDED ORDER.

Rules for Deployments.

200. All deployments are executed from column of squads, twos, or files, or from section or squad columns.

201. The platoon must be so instructed that it is able to deploy in any direction, in silence, and in order.

202. The direction may be designated prior to deployment, at the same time as the command for deployment, or after completion of the deployment. The direction may be indicated by designating a prominent point of the terrain (e. g., windmill, building, lone tree) or by signal. If the deployment is to be made in a direction varying greatly from the direction of the advance, the platoon must change direction before deploying. If no direction be designated, the platoon deploys straight to the front. Where an advance is to take place on assigned direction lines for long continued periods, a distant direction point and compass bearing are designated after deployment.

203. The leading squad is the base of deployment. It remains the base of movement after deployment, unless another squad is designated by the platoon leader. In the base platoon of the company the center squad of the leading wave is ordinarily designated as the base of the platoon; in other platoons the base squad is, as a rule, the squad on the flank toward the base platoon of the company.

204. Deployed platoons preserve a general alignment toward, and maintain interval from, the base squad within their respective fronts; individuals or squads march so as best to secure cover or facilitate the advance. Where distant direction points and compass bearings have been designated, each platoon marches in the designated direction, selecting successive points on the compass bearing or in line with the distant direction point, and moves abreast of the base platoon; intervals are automatically preserved by observance of the assigned direction. Any discrepancy in direction is, however, adjusted on the base platoon. Where it is impracticable to assign direction lines for

long periods in advance, as will ordinarily be the case in open warfare, both intervals and progress will be adjusted on the base platoon.

205. Except in case of darkness or heavy fog, platoon and section leaders deploy, assemble, and maneuver their units as far as practicable by arm signals.

Whistle signals must be sparingly used. When employed preliminary to a command during the advance into action, they give warning to the enemy of our approach, and when used to initiate a rush in the presence of the enemy, they betray to him the fact that a movement is about to commence. In general their use should be limited to moments during the fire fight when, on account of the noise of battle, it is impossible to attract the attention of the skirmishers by other means.

The habitual use of the whistle as a preliminary to a command is prohibited.

206. A deployed platoon or section advances, halts, moves by the flank or to the rear, obliques, resumes the direct march, passes from quick to double time and the reverse by the same commands and in a similar manner as in close order; if at a halt, the movement by the flank or to the rear is executed by the same commands as when marching. Changes in the direction of march are usually effected by the assignment of a new march direction to the base squad; skirmishers place themselves on the new front by gradual obliques and by opening out from, or closing in on, the base.

Movement may be interrupted by the commands **halt, lie down, or range**. On halting, a deployed line faces to the front (direction of the enemy) in all cases. If halted by the command **lie down**, skirmishers take cover; if halted by the command **range (or battlesight)**, they occupy a position on approximate line with the platoon leader and place themselves in instant readiness for firing.

207. At the command for deployment, runners join the platoon leader; when the platoon deploys as an element in the combat formation of the company, one runner joins the captain. When the platoon is in movement, the platoon leader is always on the side of the platoon toward the enemy. When the platoon is halted in a firing position, he is either in the skirmish line or in rear of it; when otherwise halted, he remains in front of his platoon. He is not bound to a fixed post in front of his platoon, but must not move so far to the front as to lose control over it. The post of the platoon sergeant is in rear of the center of the leading wave. During forward or flank movements section leaders are on the side of the section toward the enemy. During movements to the rear they are on the side opposite to the enemy.

When their sections are halted in a firing position they are either in the skirmish line or in rear of it. When otherwise halted they are in front of their sections. Section guides are always on the side of the section opposite to the enemy, generally near the center of their sections.

208. In each squad two selected men are especially trained as scouts; of these, one man is permanently designated as scout. Scouts move out in front of their sections and cover the advance when so directed by the platoon leader; when necessary, they may be reinforced by the alternate scout of one or more squads. When scouts are sent out to a considerable distance (300-500 yards) in front of the platoon, they should operate as a patrol deployed at wide intervals, under a designated leader.

209. The assembly formation is always column of squads unless otherwise directed by the platoon leader.

Deployments.

210. Being in column of squads, twos, or files, or section columns, to deploy as skirmishers:

1. As skirmishers, 2. MARCH.

The corporal of the leading squad moves in quick time straight to the front or in the direction indicated by the platoon leader. The leading squad deploys abreast of its corporal (par. 124). The center and rear squads of the leading section deploy abreast of the leading squad, the center squad on its right, the rear squad on its left, men running individually toward their places on the line as soon as disengaged from column. If the leading section consists of only two squads, the rear squad deploys on the right of the leading squad.

The rear section deploys abreast of its leading squad and parallel to the line of the leading section as described for that section, the leading squad deploying in place. Unless otherwise directed by the platoon leader, the rear section gains a distance of approximately 50 paces from the leading section, standing fast or moving to the rear after deployment if necessary; if the platoon advances, the rear section follows the leading section, modifying its distance as required by considerations of cover.

The platoon sergeant, section leaders and guides, and runners take their prescribed posts.

Scouts of the leading section move forward 150 yards (or a specially designated distance or to a specially designated line) in front of their sections when so directed by the platoon leader ("Scouts out").

Squads may be deployed on one flank only of the leading squad of each section by the command: **1. As skirmishers,**

right (left), 2. **MARCH** Executed as above described except that in each section the squads in rear of the leading squad of the section deploy on the right and abreast of the leading squad of the section.

One section only may be deployed by the command:

1. (Such) Section, 2. As skirmishers (right, left), 3. **MARCH**. Executed by the designated section as above described for the leading section.

211. Being in column of squads, twos, or files, to deploy in line of squad columns.

1. Squad columns, 2. **MARCH**, or 1. Squad columns, right (left), 2. **MARCH**.

Executed as prescribed in paragraph 210, except that each squad if not already in column of files, executes left by file and follows its leader; leaders of squads in rear of the leading squad of each section conduct their squads in double time to their places abreast of the leading squad of the section.

The formation in line of squad columns may be combined with line of skirmishers by appropriate commands; example: 1. First Section, as skirmishers, 2. Second Section, squad columns, 3. **MARCH**.

Distance between men in squad columns is such as will permit ease in marching.

212. Section columns are sections in column of twos; the sections are disposed with reference to each other abreast, in column with distance between sections, in echelon, or other formation required by the terrain or available cover, as directed by the platoon leader. When section or squad columns are formed in echelon or other irregular formation, they regulate their march on the most advanced unit.

Section columns may be formed from close-order formation by forming column of twos in accordance with the principles of close order and disposing the sections in such manner as the situation may require. If the sections are to be disposed abreast, the platoon should be formed in line of sections as described in paragraphs 184 and 185. Easy marching distances between men in section columns are maintained.

213. Being in skirmish line, to form line of squad columns:

1. Squad columns, 2. **MARCH**

Each squad leader moves to the front; the members of each squad oblique at a run toward their squad leader and follow him in single file at easy marching distances.

214. Being in line of squad columns, to form line of skirmishers:

1. As skirmishers, 2. **MARCH**.

Each squad deploys, the skirmishers forming in the same relative order as in deployment from close-order formation.

215. Being in line of skirmishers or squad columns, to form section columns:

1. Section columns, 2. **MARCH.**

Section leaders move forward in front of their sections. Men move individually at a run toward their section leader and assemble by squad in column of twos in his rear, squads in the same relative order as in normal formation of the section in close order, corporals at the head of their squads.

Section guides follow in rear of their respective sections to insure the prompt and orderly execution of the advance.

216. Intervals between skirmishers are increased or decreased from or toward the base squad, as described in the School of the Squad.

The Assembly.

217. Being in skirmish line, to assemble the platoon:

The platoon leader takes post at, or designates, the point at which the platoon is to assemble and signals:

1. Assemble, 2. **MARCH.**

The platoon assembles in column of squads, in the same relative order as in the normal formation of the platoon in close order (right in front).

The leading squad assembles as prescribed in the School of the Squad at the designated point. Men of other squads move individually at a run toward the assembly point, corporals placing themselves in their normal position in column of squads in rear of the corporal of the leading squad, each squad assembling on its corporal. Section leaders, guides, and runners take their prescribed posts.

If assembled by squads or sections or in section or squad columns, these are conducted to the assembly point and formed in their normal relative order by squad or section leaders.

Sections may be assembled by the command:

1. Sections, assemble, 2. **MARCH.**

Executed by each section as prescribed for the platoon.

Squads may be assembled by the command:

1. Squads, assemble, 2. **MARCH.**

Executed by each squad as described in the School of the Squad.

One section or one or more squads may be assembled by the command:

1. (Such) Section (or Squad(s)), assemble, 2. **MARCH.**

Advance by Rushes.

218. Being in skirmish line, to advance by rushes:

The platoon leader indicates the line or cover to be reached, if practicable, and commands:

1. By section (squad, four men, etc) from the right (left),
2. **RUSH.**

The leader of the indicated fraction gives the commands:

1. Cease firing, 2. **PREPARE TO RUSH.** The men of the fraction indicated cease firing and hold themselves in readiness to spring forward instantly, taking care not to betray to the enemy by any movement of the body or the rifle the fact that a rush is about to take place. Each man takes his rifle in his left hand, supports himself on his right hand, draws up the right knee close to the body, without raising the trunk from the ground. When ready, the leader of the rush commands **UP**; the leader and his men spring to their feet and running at top speed gain the new position, where they throw themselves on the ground and open fire. The leader of the rush selects the new line if it has not been previously designated.

The first fraction having established itself on the new line, the next like fraction is sent forward by its section leader without further command of the platoon leader, and so on successively until the entire wave is on the line established by the first rush. The platoon leader may direct that successive fractions execute the rush only upon his signal.

A rear wave advances to the position vacated by the leading wave or remains in its original position or otherwise maneuvers according to circumstances, as directed by the platoon leader or on the initiative of the section leader.

219. When the leading wave comprises more than one section, the rush of the wave as a whole is conducted by the platoon leader, as described for a section in the preceding paragraph. The platoon leader leads the rush; section leaders lead their respective sections. In order to obtain full advantage of the effect of surprise, the fraction initiating the rush should be as large as possible.

Advance by Infiltration.

220. Being in skirmish line, to cross open, fire-swept areas by independent advances of individuals or squads.

The platoon leader commands:

1. On (such line, e. g., crest, hedge, road, etc.), 2. **RE-FORM.**

Each squad leader decides on the best method of reaching the designated line, whether by leading the squad as a whole along a covered route or by men working their way forward individually.

The platoon leader must recover control over his platoon at the designated position before attempting a further advance.

This method of advance finds especial application at long range or when the source of hostile fire can not be discovered and beaten down.

FIRE.

221. Ordinarily pieces are loaded and extra ammunition is issued before the platoon deploys for combat.

In close order the platoon executes the firings at the command of the platoon leader, who posts himself in rear of the center of the platoon.

Usually the firings in close order consist of saluting volleys only.

222. When the platoon is deployed, the men execute the firings at the command of the platoon leader as long as this is possible; when the platoon is deployed over an extensive front with both sections in the first line, firings will ordinarily be executed at the command of section leaders. They give such commands as are necessary to carry out the platoon leader's directions and from time to time add such further commands as are necessary to continue, correct, and control the fire ordered.

223. The voice is frequently inadequate for giving commands during fire and must be replaced by signals of such character that proper fire control is assured. To attract attention signals must often be preceded by the whistle signal (short blast). A fraction of the firing line about to rush should avoid using the whistle signal as an aid to cease firing. Officers and men behind the firing line can not ordinarily move freely along the line but must depend on mutual watchfulness and the proper use of the prescribed signals. All should post themselves so as to see their immediate superiors and subordinates. Squad leaders and, when necessary, the skirmishers transmit orders along the skirmish line by word of mouth, stating the source of the order.

224. Runners or other designated observers assist the platoon leader by observing the enemy, the target, and the fire effect, by transmitting commands or signals, and by watching for signals.

Ranges.

225. For convenience of reference, ranges are classified as follows:

- 0 to 600 yards, close range;
- 600 to 1,200 yards, mid range;
- 1,200 to 2,000 yards, long range;
- 2,000 yards and over, distant range.

226. During an advance it is ordinarily impracticable to ascertain the effect of rifle fire from observation of the strike of the bullets, and to correct the unavoidable errors in range

estimation at mid and long ranges. On the other hand, the close grouping of the fire of machine guns makes practicable the observation and correction of their fire. Fire at mid and long ranges during an advance should therefore be reserved to the machine guns, except where especially favorable targets such as bodies of hostile troops in close order offer themselves.

On the defensive, more accurate knowledge of ranges will permit of effective rifle fire at mid ranges.

Classes of Fire.

227. Volley fire has limited application. In defense it may be used in the early stages of the action, if the enemy presents a large, compact target. It may be used by troops executing fire of position. When the ground near the target is such that the strike of bullets can be seen from the firing line, ranging volleys may be used to correct the sight setting.

In combat, volley firing is executed habitually by platoon or section.

228. Fire at will is the class of fire normally employed in attack and defense.

229. Clip fire has limited application. It is principally used: (1) in the early stages of combat, to steady the men by habituating them to brief pauses in firing; (2) to produce a short burst of fire.

The Target.

230. Where practicable the captain distributes the objective among his platoons at the initial firing position. Otherwise, each platoon leader takes as his target that part of the company objective which corresponds to his position in the company.

231. The platoon will, however, be able to limit its fire to its assigned objective in rare cases. Inequality in the advance of different units will expose the flanks of advanced elements to enfilade fire. Points of resistance on the flanks must be dealt with by the flank elements, particularly the automatic rifles, and by units from the second wave. Mutual support of adjacent platoons will also require fire on objectives of other units. Wherever practicable, the platoon leader will assign such objectives to flank elements of his platoon or to units of the second wave; when necessary, squad or section leaders act on their own initiative.

Fire Control.

232. The platoon leader selects the target, announces the range, and gives the commands for opening fire as long as this

is possible in combat. When the ability of the platoon leader to control the fire of his platoon ceases, section and squad leaders control the fire of their units on their own initiative.

233. As long as the platoon leader retains power to control the fire of his platoon, it is the duty of section leaders to observe the target and remain on the alert for the platoon leaders commands or signals; they observe and regulate the rate of fire. Section guides watch the firing line and check every breach of fire discipline. Squad leaders transmit commands and signals, when necessary, observe the conduct of their squads, assist in enforcing fire discipline, and participate in the firing.

Fire control implies the ability to open simultaneous fire, to stop firing, change the sight setting and target, and resume a well directed fire.

Fire Discipline.

234. Fire discipline implies the exact execution of orders and careful observance of instructions relative to the use of the rifle and to conduct in action. It implies care in sight setting, aim, trigger squeeze, constant observation of the enemy, close attention to the leader, independent increase in the rate of fire when the target becomes more favorable, cessation of fire when the enemy disappears, and economy in ammunition. It also implies that when the fire control of leaders becomes impracticable, each man will act on his own initiative and select sight setting and target independently. To stimulate the initiative of the skirmishers, frequent exercises in which leaders are lacking should be carried out.

235. In an advance by rushes, leaders of troops in firing positions are responsible for the delivery of heavy fire to cover the advance of each rushing fraction. Troops are trained to change slightly the direction of fire so as not to endanger the flanks of the advanced portions of the firing line.

236. In defense, when the target disappears behind cover, platoon leaders suspend fire, prepare their platoons to fire upon the point where it is expected to reappear, and greet its reappearance instantly with vigorous fire.

SCHOOL OF THE COMPANY.

237. From the viewpoint of training, the captain is the most important commander of the arm upon which the decision in battle depends, the infantry. It is his task to develop in his men patriotism, soldierly virtues, and the desire to close with the enemy. He must make his men efficient fighters, and his

platoon leaders and noncommissioned officers capable and aggressive leaders.

238. The captain is responsible for the theoretical and practical instruction of his officers and noncommissioned officers, not only in the duties of their respective grades, but in those of the next higher grades.

He must be careful not to curtail the initiative of his subordinates by unnecessary interference. In general, while giving them thorough instruction in the methods of training and command, he should accord them the same degree of initiative in the performance of tasks that he will be compelled to give them in the execution of combat missions.

239. The company at full strength comprises 4 platoons of 6 squads each and company headquarters. This organization will be maintained until the number of complete squads in the company falls below 12. A company of less than 12 and more than 8 squads will be organized into 3 platoons; one of less than 9 and more than 5 squads into two platoons. Within these limits the permanency of platoons will be maintained and transfers of personnel between platoons avoided as far as practicable.

The administration of the interior economy of the company will be based upon platoon and squad organization.

240. The formation of the company are: Line, column of platoons (at full distance or in close column), line of platoons (at full or close intervals), and column of squads. Of these formations, the first two are assembly, ceremonial, and drill formations; they have no application to field service or deployments. In close-order drill the formation in line is exceptional; column of platoons will be habitually employed for drilling troops in marching in line. The column of squads and line of platoons (modified according to conditions) are employed on the march, in the advance into action, and in deployments for attack or defense.

241. The company assembles in formation, in line or close column of platoons, as directed by the captain or higher commanders (Pls. II and III).

242. At the formation of the company in line, the platoons are numbered consecutively from right to left, and these designations do not change.

For convenience in giving commands and for reference, the designations, right, center, left, when in line, and leading, center, rear, when in column, are applied to platoons. These designations apply to the actual right, left, center, head, or rear, in whatever direction the company may be facing. The center platoon is the actual center or right center platoon of the company. The designation "So-and-so's" platoon may also be used.

243. Lieutenants are assigned as follows:

Senior first lieutenant, second in command.

Second senior first lieutenant, commanding first platoon.

Junior first lieutenant, commanding fourth platoon.

Senior second lieutenant, commanding second platoon.

Junior second lieutenant, commanding third platoon.

The four senior duty sergeants are assigned as assistants to platoon leaders, one with each platoon, and are designated as platoon sergeants. The next in rank are assigned as guides, two to each platoon; in section movements and in extended order they command sections.

The first sergeant, supply sergeant, and mess sergeant are not assigned as guides.

244. The company headquarters detachment is formed by the senior noncommissioned officer or private present, in the position shown in the plates. For purposes of instruction members of the detachment may be attached to a platoon and with the platoon runners temporarily organized into an extra squad. Such attachment must not affect the permanent squad organization of the platoon.

245. A company of less than six squads is led by the captain as a single platoon, but retains the designation of company. The lieutenants and first sergeant command sections or assist in fire control; the other sergeants place themselves in the firing line as skirmishers.

CLOSE ORDER.

Rules.

246. Platoon leaders repeat such preparatory commands as are to be immediately executed by their platoons, as forward, squads right, etc.; the men execute the commands march, halt, etc., if applying to their platoons, when given by the captain. In movements executed in route step or at ease, the platoon leaders repeat the command of execution, if necessary. Platoon leaders do not repeat the captain's commands in executing the manual of arms nor those commands which are not essential to the execution of a movement by their platoons, as column of squads, first platoon, squads right, etc. In giving commands or cautions, platoon leaders may prefix the numbers of their platoons, as **1st Platoon, HALT; 2d Platoon, squads right, etc.**

247. At the command guide center (right or left), platoon leaders command: Guide right or left, according to the positions of their platoons. Guide center designates the left guide of the center platoon.

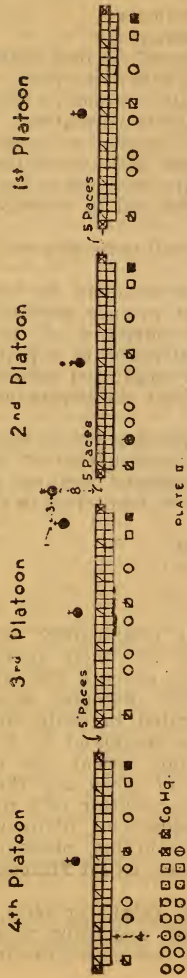
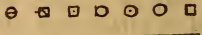


PLATE II.

LEGEND



- CAPTAIN
- LIEUTENANT
- FIRST SERGEANT
- SUPPLY SERGEANT, MESS SERGEANT
- PLATOON SERGEANT
- SERGEANTS (PLATOON GUIDES AND SECTION LEADERS)
- CORPORALS, (SQUAD LEADERS)



- CORPORAL (Co. CLERK)
- CORPORALS, (SECTION GUIDES)
- COOKS
- MECHANICS
- BUGLER
- SIGNALMEN, AGENTS, RUNNERS
- PRIVATEES

Line (Platoons in Line)

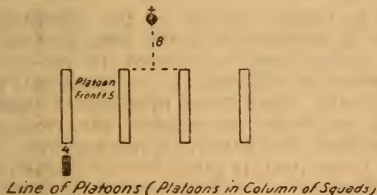
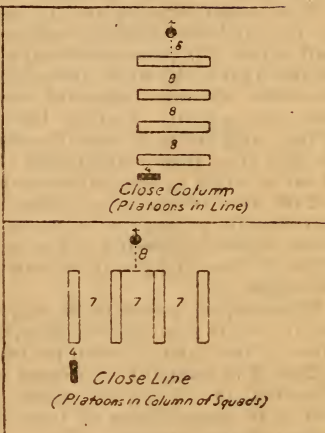
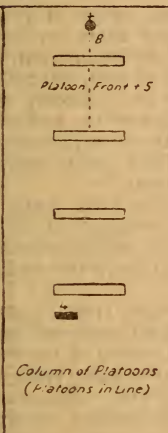


PLATE III.

Numerals are Intervals or Distances in Paces. All intervals and distances are measured between guides

248. When the platoons are to be dressed, platoon leaders place themselves on that flank toward which the dress is to be made as follows:

The company in line: Beside the guide (or the flank file of the front rank, if the guide is not in line) and facing to the front.

The company in column of platoons: Two paces from the guide, in prolongation of and facing down the line.

Each platoon leader, after dressing his platoon, commands: **FRONT**, and takes his post.

The company being in line and unless otherwise prescribed, at the platoon leader's command **dress**, or at the command **halt**, when it is prescribed that the platoon shall dress, the guide on the flank away from the point of rest, with his piece at right shoulder, dresses promptly on the platoon leader and the platoons beyond. During the dress he moves, if necessary, to the right and left only; the platoon leader dresses the platoon on the line thus established. The guide takes the position of order arms at the command **front**.

249. The company executes the halt, rests, facings, steps, and marchings, manual of arms, resumes attention, kneels, lies down, rises, stacks and takes arms, as explained in the Schools of the Soldier and Squad, substituting in the commands company for squad.

The company executes squads right (left), squads left (right) about, route step and at ease, and obliques and resumes the direct march, as explained in the School of the Platoon.

250. The company in column of squads, twos, or files changes direction, in column of squads forms column of twos or files and re-forms columns of twos or squads, as explained in the School of the Platoon.

251. When the formation admits of the simultaneous execution by platoons of movements in the School of the Platoon, the captain may cause such movement to be executed by prefixing, when necessary, platoons to the commands prescribed therein: As 1. **Platoons, right front into line**, 2. **MARCH**. To complete such simultaneous movements, the commands **halt** or **march**, if prescribed, are given by the captain. The command **front**, when prescribed, is given by the platoon leaders.

252. The company as a unit executes the loadings and firings only in firing saluting volleys. The commands are as for the platoon, substituting **company** for **platoon**. At the first command for loading, platoon leaders take post in rear of the center of their respective platoons. At the conclusion of the firing, they resume their posts in line.

On other occasions, when firing in close order is necessary, it is executed by platoons or other subdivisions under instructions from the captain.

To Form the Company.

253. The first sergeant takes position 6 paces in front of the point where the center of the company is to be, faces it, and commands: **FALL IN.**

The right guide of the first platoon places himself, facing to the front, where the right of the platoon is to rest, and at such point that the center of the company or the leading platoon will be 6 paces from and opposite the first sergeant; right guides of other platoons place themselves successively at prescribed interval or distance from the right guide of the first platoon; platoon sergeants take post 3 paces in front of the point where the center of their platoons will be; the platoons form in their proper places, superintended by the platoon sergeants and guides. (See plates.)

The platoon sergeants then command: **REPORT.** Remaining in position at the order, the squad leaders, in succession from the right, in each platoon, salute and report: "All present"; or "Private(s) — absent." The platoon sergeants do not return the salutes of the squad leaders; they then command: 1. **Inspection**, 2. **ARMS**, 3. **Order**, 4. **ARMS**, face about, and at the command report, given by first sergeant, salute the first sergeant and beginning with the first platoon, successively report: "(1st, 2d, etc.,) platoon, present or accounted for," or the number of the unauthorized absentees.

All platoons and the headquarters detachment having reported, the first sergeant commands: **POSTS**, and the platoon sergeants take posts. The first sergeant then faces about, salutes the captain, and reports: "Sir, all present or accounted for," or, "Sir, — men are absent," and without command takes his post.

The first sergeant returns the salute of the platoon sergeants.

If the platoons can not be formed by squads, the platoon sergeant commands: 1. **Inspection**, 2. **ARMS**, 3. **Right shoulder**, 4. **ARMS**, and calls the roll. Each man, as his name is called, answers here and executes order arms. The platoon sergeant then effects the division into squads and reports the platoon as prescribed above.

The captain places himself 12 paces in front of the center of, and facing, the company or the leading platoon in time to receive the report of the first sergeant, whose salute he returns.

The platoon leaders take their posts when the first sergeant has reported.

The noncommissioned officer or private in charge of the company headquarters detachment forms the detachment and reports as prescribed for the platoon sergeants.

The company, not under arms, is formed in like manner, omitting reference to arms.

To Dismiss the Company.

254. Being in line or close column at a halt, the captain directs the first sergeant: **Dismiss the company.** The officers fall out; the first sergeant moves 6 paces in front of the center of the company or the leading platoon, salutes, faces toward the company, and commands: 1. **Inspection**, 2. **ARMS**, 3. **Port**, 4. **ARMS**, 5. **DISMISSED**.

The captain returns the salute of the first sergeant.

Dismissal may also take place by directions to the platoon leaders; the captain commands: **Dismiss your platoons.** Each platoon is then dismissed as described for the company, the platoon sergeant performing the duties described for the first sergeant. The headquarters detachment is dismissed by its leader.

To Rectify the Alignment.

255. Being in line at a halt, to align the company: 1. **Center** (right or left), 2. **DRESS**.

The platoon leaders dress their platoons successively toward the center (right or left) guide of the company, each as soon as the platoon leader next toward the indicated guide commands: **Front**. The platoon leaders of the center platoons (if the dress is center) dress them without waiting for each other.

256. To give the company a new alignment: 1. **Guides center** (right or left) platoon on the line, 2. **Guides on the line**, 3. **Center** (right or left), 4. **DRESS**, 5. **Guides**, 6. **POSTS**.

At the first command, the designated guides place themselves on the line facing the center (right or left). The captain establishes them in the direction he wishes to give the company.

At the second command, the guides of the other platoons take posts, facing the center (right or left), so as to prolong the line.

At the command **dress**, each platoon leader dresses his platoon to the flank toward which the guides of his platoon face.

At the command **posts**, given when all platoons have completed the dress, the guides return to their posts.

To Rectify the Column.

257. Being in column of platoons or in close column, at a halt, if the guides do not cover or have not their proper distances, and it is desired to correct them, the captain commands: 1. **Right** (left), 2. **DRESS**.

Leaders of platoons in rear of the leading platoon place their right guides so as to cover at the proper distance; each platoon leader aligns his platoon to the right and commands: **FRONT**.

On Right (Left) into Line.

258. Being in column of squads or platoons: 1. **On right (left) into line**, 2. **MARCH**, 3. **Company**, 4. **HALT**.

Being in column of squads: At the first command, the leader of the leading platoon commands: **Squads right**. If at a halt, each platoon leader in rear commands: **Forward**. At the second command, the leading platoon marches in line to the right; the platoons in rear continue to march to the front and form successively on the left, each, when opposite its place, being marched in line to the right.

The fourth command is given when the leading platoon has advanced the desired distance in the new direction; it halts and is dressed to the right by its leader. The others complete the movement, each being halted 1 pace in rear of the line established by the leading platoon, and then dressed to the right.

Being in column of platoons: At the first command the leader of the leading platoon commands: **Right turn**. If at a halt, each platoon leader in rear commands: **Forward**. Each of the platoon leaders in rear of the leading platoon gives the command: 1. **Right turn**, in time to add, 2. **MARCH**, when his platoon arrives opposite the right of its place in line.

The fourth command is given and the movement completed as explained above.

Whether executed from column of squads or column of platoons, each platoon leader places himself so as to march beside the right guide after his platoon forms line or changes direction to the right.

If executed in double time the leading platoon marches in double time until halted.

Front into Line.

259. Being in column of squads or platoons: 1. **Right (Left) front into line**, 2. **MARCH**.

Being in column of squads: At the first command the leader of the leading platoon commands: **Column right**; the leaders of platoons in rear, **column half right**. At the second command, the leading platoon executes column right, and as the last squad completes the change of direction is formed in line to the left, halted, and dressed to the left. Each of the platoons

in rear is conducted by the most convenient route to the rear of the right of the preceding platoon, thence to the right, parallel to and 1 pace in rear of the new line; when opposite its place it is formed in line to the left, halted, and dressed to the left.

Being in column of platoons: If marching the leader of the leading platoon gives the necessary commands to halt his platoon at the second command; if at a halt the leading platoon stands fast. At the first command the leader of each platoon in rear commands: **Squads right, or Right by squads,** and after the second command conducts his platoon by the most convenient route to its place in line, as described above.

Whether executed from column of squads or column of platoons, each platoon leader halts when opposite or at the point where the left of his platoon is to rest.

To Form Column of Platoons Successively to the Right or Left.

260. Being in column of squads: 1. Column of platoons, First (Fourth) Platoon, squads right (left), 2. **MARCH.**

The leading platoon executes squads right and moves forward. The other platoons move forward in column of squads and successively march in line to the right on the same ground as the leading platoon and in such manner that the guide covers the guide of the preceding platoon.

To Form Column of Squads Successively to the Right or Left.

261. Being in column of platoons: 1. Column of squads, First (Fourth) Platoon, squads right (left), 2. **MARCH.**

The leading platoon executes squads right and moves forward. The other platoons move forward in column of platoons and successively march in column of squads to the right on the same ground as the leading platoon.

To Change Direction.

262. Being in column of platoons or close column: 1. Column right (left), 2. **MARCH.**

The leader of the leading platoon commands: **Right turn.**

The leading platoon turns to the right on moving pivot, the platoon leader adding: 1. **Forward,** 2. **MARCH,** upon its completion.

The other platoons march squarely up to the turning point; each changes direction by the same commands and means as the first and in such manner that the guide covers the guide of the preceding platoon.

263. Being in line of platoons or close line: 1. Company right (left), 2. **MARCH**, 3. Company, 4. **HALT**.

The right platoon changes direction to the right; the other platoons are conducted by the shortest line to their places abreast of the first.

The fourth command is given when the right platoon has advanced the desired distance in the new direction; that platoon halts; the others halt successively upon arriving on the line.

264. Being in column of squads, the company changes direction by the same commands and in the manner prescribed for the platoon.

Mass Formations.

265. Being in line of platoons: 1. Close on First (Fourth) Platoon, 2. **MARCH**, 3. Company, 4. **HALT**.

At second command the indicated platoon moves straight to the front or in the direction indicated by the captain; it halts at the fourth command. The other platoons are conducted toward it and successively halted in close line (Pl. III).

Being in line or in column of platoons: 1. Close on First (Fourth) Platoon, 2. **MARCH**.

At the second command the indicated platoon halts or stands fast. The other platoons are conducted toward it and are halted successively in close column in its rear (Pl. III).

In close column formed from line on the right platoon the left guides cover; formed on the left platoon, right guides cover. If formed from column of platoons, the guide remains as before the formation.

Being in column of squads: 1. Line of platoons (so many paces), 2. Right (left), 3. **MARCH**, 4. Company, 5. **HALT**.

At the third command the leading platoon moves straight to the front or in the direction indicated by the captain; it halts at the fifth command. The other platoons are conducted in column of squads on the indicated flank and halted successively at the prescribed interval abreast of the leading platoon. To form close line, an interval of 7 paces is designated. If no interval be designated, the platoons form at intervals of platoon frontage plus 5 paces.

To Extend the Mass.

266. Being in close column: 1. Extend on First (Fourth) Platoon, 2. **MARCH**.

At the second command the leading platoon moves straight to the front. The other platoons halt or stand fast and successively move forward in time to follow at full distance.

The extension is made on the rear platoon only.

Close column is not extended in double time.

Being in close line: 1. Extend on First (Fourth) Platoon, 2. **MARCH**, 3. Company, 4. **HALT**.

At the second command the indicated platoon moves straight to the front or in the direction indicated by the captain. It halts at the fourth command.

Each of the other platoons is conducted away from the indicated platoon and is halted in its proper order in line of platoons abreast of the indicated platoon.

For special purposes, close column or close line may be formed or extended at other than normal distance or interval by designating the distance or interval (so many paces) after the preparatory command for closing or extending.

267. Being in close column: 1. Right (left) front into line, 2. **MARCH**. Executed as from column of platoons.

268. Being in close column: 1. Column of squads, First (Fourth) Platoon, squads right (left), 2. **MARCH**.

The designated platoon marches in column of squads to the right. Each of the other platoons executes the same movement in time to follow the preceding platoon in column.

269. Being in close line: 1. Column of squads, First (Fourth) Platoon, forward, 2. **MARCH**.

The designated platoon moves forward. The other platoons (halting if in march) successively take up the march and follow in column.

Route Step and At Ease.

270. The company marches in route step and at ease as prescribed in the School of the Platoon. When marching in column of platoons, the guides maintain the trace and distance. In route marches file closers march at the head or in rear of their platoons or the company.

Assembly.

271. The company being wholly or partially deployed, or the platoons being separated: 1. Assemble, 2. **MARCH**.

The captain places himself opposite to or designates the element or point on which the company is to assemble. Platoons are assembled and marched to the indicated point. As the platoons arrive, the captain indicates the formation to be taken.

THE BATTALION.

272. The battalion being purely a tactical unit, the major's duties are primarily those of an instructor in tactics and of a

Paragraph 273 amended to read:

The formations of the battalion (Plate IV) are: Line (companies in line), line of close columns (companies in close column), close column (companies in close column), close line (companies in close line), column of close lines (companies in close line), and column of squads.

The column of squads is the only formation that has any application in campaign. It is extended for approach march or combat in the formation required by the situation.

The formation in line is employed only for ceremonies in which a single battalion participates.

For ceremonies involving two or more battalions, the battalion is formed in line of close columns, close column, close line, or column of close lines.

Plate IV amended as shown in revised Plate IV, page 6.

tactical commander. He is responsible for the theoretical and practical training of the battalion. He supervises the training of the companies of the battalion with a view to insuring the thoroughness and uniformity of their instruction.

In the instruction of the battalion as a whole his efforts will be directed chiefly to the development of tactical efficiency, devoting only such time to the mechanism of drill and to the ceremonies as may be necessary in order to insure precision, smartness, and proper control.

~~273. The formations of the battalion (Pl. IV) are: Line (companies in line), line of masses (companies in close column), column of squads, and column of masses (companies in close column).~~

~~The column of squads is the only formation that has any application in campaign. It is extended for approach march or combat in the formation required by the situation.~~

~~The formation in line is employed only for ceremonies in which a single battalion participates.~~

~~For ceremonies involving two or more battalions, the battalion is formed in line of masses or column of masses, depending on the number of units participating and the space available.~~

~~274. The companies are generally arranged from right to left according to the rank of their commanding officers. The arrangement of the companies may be varied by the major or higher commanders.~~

~~After the battalion is formed no cognizance is taken of the relative order of the companies.~~

~~275. In whatever direction the battalion faces, the companies are designated numerically from right to left in line, and from head to rear in column, first company, second company, etc.~~

~~The terms right and left apply to actual right and left as the line faces; if the about by squads be executed when in line, the right company becomes the left company and the right center becomes the left center company.~~

~~The designation, center company, indicates the right center or the actual center company, according as the number of companies is even or odd.~~

~~276. The band and other special units, when attached to the battalion, take the same post with respect to it as if it were the nearest battalion shown in Plate V.~~

~~277. The major either gives his commands or orders orally, by bugle, or by signal, or communicates them by staff officers or orderlies.~~

~~Each captain gives the appropriate commands or orders, and in close-order movements causes his company to execute the necessary movements at his command of execution. Each captain ordinarily moves his company from one formation to~~

another in column of squads, in the most convenient manner, and, in the presence of the enemy, in the most direct manner consistent with cover.

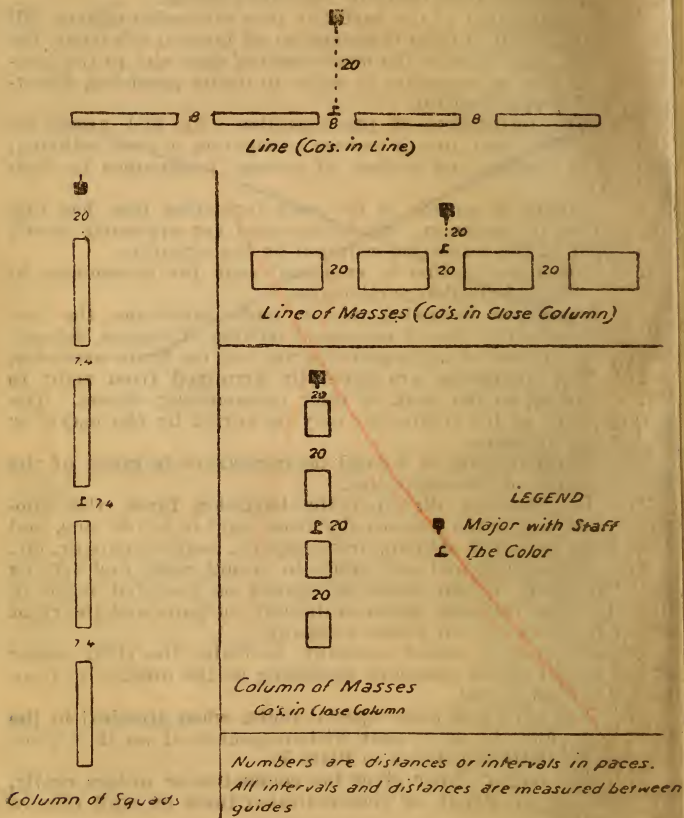
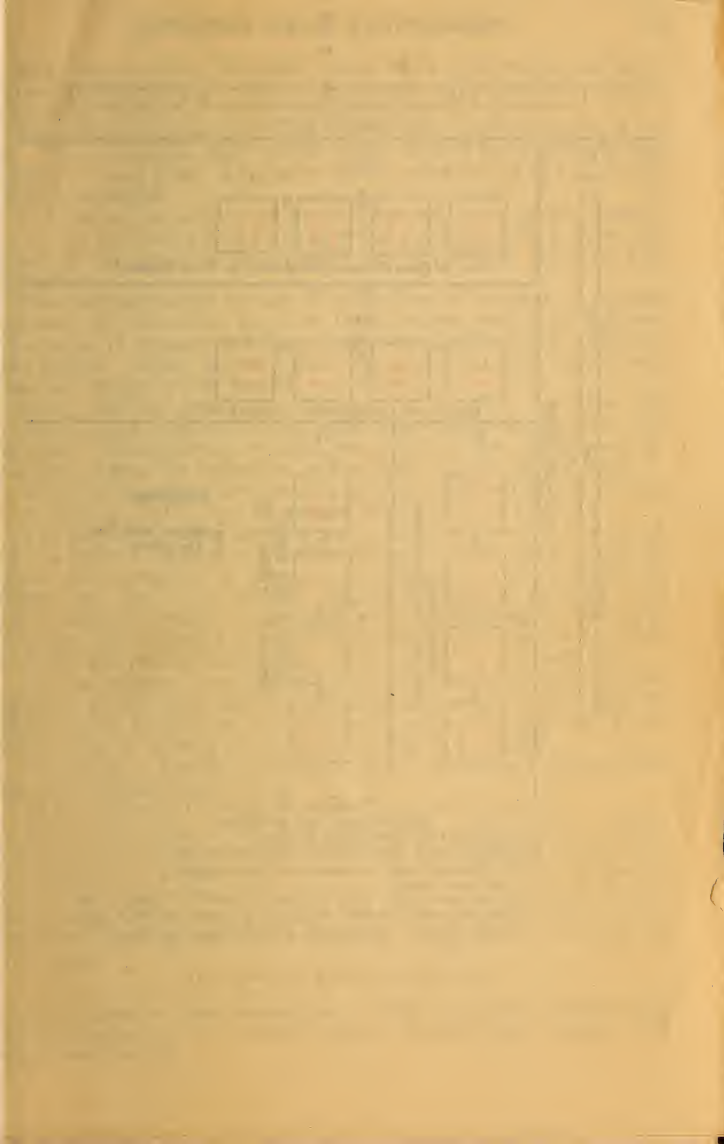
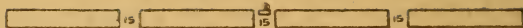


Plate IV.

278. Except at ceremonies, or when rendering honors, or when otherwise directed, after the battalion is formed, the companies march and stand at ease during subsequent movements.





Line (Companies in Line)



Column of Squads



Line of Close Columns (Companies in Close Column)



Close Line (Companies in Close Line)



Close Column
(Companies in Close Column)



Column of Close Lines.
(Companies in Close Line)

LEGEND



-  Major with Staff
-  The Colors

PLATE IV.

Formations of the Battalion.

Diagrammatic:- Not drawn to scale.

Numerals are distances or intervals in paces

All intervals and distances are measured between guides

Distance of Major's post in front of center of battalion in line of Close Columns: 30 paces in formations of a single battalion: 15 in formations of a Regiment or larger unit.

279. For ordinary purposes, other than ceremonies, the battalion is formed in column of squads. For special reasons a different formation may be prescribed by the major.

The adjutant informs the captains what the formation is to be. The companies and special units having been formed, the adjutant takes post. Adjutant's call is sounded, or the adjutant signals assemble.

If forming in column of squads, the adjutant posts himself so as to be facing the column when formed, and 6 paces in front of the place to be occupied by the leading guide of the battalion.

The companies are halted, at attention, in column of squads successively from the front in their proper order and places. The band, if present, takes its place when the leading company has halted. Other special units take their places in turn when the rear company has halted.

Each captain, when his company is in place, salutes the adjutant and commands: At ease; the adjutant returns the salutes. When all have saluted, the adjutant rides to the major, reports: "Sir, the battalion is formed," and takes his post.

280. For battalion ceremonies, or when directed, the battalion is formed in line or line of ~~masses~~. *Close Columns.*

The adjutant posts himself so as to be 6 paces to the right of the right company, or leading platoon of the right company, when the battalion is formed, and faces in the direction in which the line is to extend. Adjutant's call is sounded; the band plays if present. As soon as the right company has been aligned, the adjutant takes post facing the battalion midway between the post of the major and the center of the battalion.

The companies, arriving from the rear, each in line or close column, as the case may be, are halted on the line successively from right to left in their proper order and places. Upon halting, each captain commands: 1. Right, 2. DRESS.

The band is posted by the adjutant. It ceases to play when the left company has halted.

The major and those who accompany him take post.

When all parts of the line have been dressed, and officers and all others have reached their posts, the adjutant commands: 1. Present, 2. ARMS. He then turns about and reports to the major: "Sir, the battalion is formed"; the major directs the adjutant: "Take your post, Sir," and brings the battalion to the order. The adjutant takes his post, passing to the right of the major.

TO DISMISS THE BATTALION.

281. Dismiss your companies. Staff and noncommissioned staff officers fall out; each captain marches his company off and dismisses it.

MOVEMENTS OF THE BATTALION.

282. The column of squads is the usual column of march. To shorten the column, if conditions permit, a double column of squads may be used, the platoons of each company marching abreast in two columns. Preliminary to an engagement, the battalion or its units will be placed in the formation best suited for its subsequent tactical employment.

283. The battalion does not engage in prescribed drills. To assume any formation, the major indicates to the captains the character of the formation desired, the order of the companies, and the point of rest. Each company is conducted by its captain and is placed in its proper order in the formation, by the most convenient means and route.

Having halted in a formation, no movements for the purpose of correcting minor discrepancies in alignments, intervals, or distances are made unless specially directed by the major or necessitated by the conditions of cover.

The major may employ the commands prescribed in the Schools of the Soldier, the Squad, the Platoon, and the Company, where applicable; proper substitutions in the designation of the units are made, when necessary.

THE REGIMENT.

284. These regulations are applicable to the battalions of the regiment. Special units, such as band, headquarters company, machine-gun company, and supply company, have special formations for their own use; they conform to the movements of the battalions unless otherwise prescribed.

285. The colonel is responsible for the theoretical instruction and practical training of the regiment as a whole. Under his immediate supervision, the training of the units of the regiment is conducted by their respective commanders.

286. The colonel gives his commands or orders verbally, in writing, by bugle, by signal, or communicates them by staff officers or orderlies. Battalion and special-unit commanders move their commands from one formation to another in the most convenient manner, subject to the considerations of the situation and terrain.

287. During ceremonies, the lieutenant colonel is posted two paces to the left of, and one pace less advanced, than the colonel. At other times, he takes position as directed by the colonel.

288. In whatever formation the regiment may be, the battalions retain their permanent administrative designations of first, second, third battalion. For convenience, they may be

Paragraph 291 amended to read as follows:

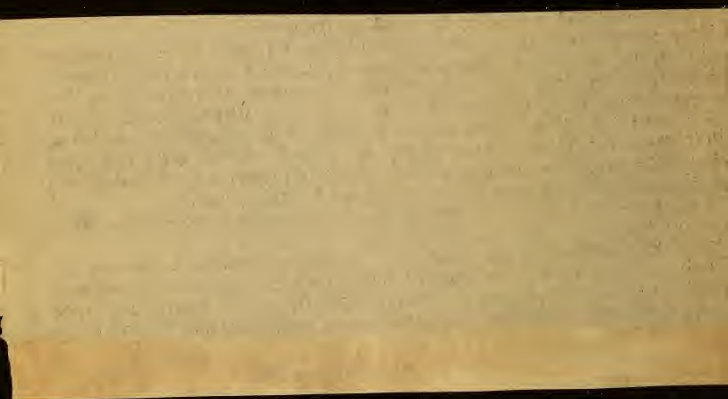
The formations of the regiment (Plate V) are: Line of masses (battalions in line of close columns), line of battalion columns (battalions in close column), column of masses (battalions in line of close columns), column of battalion close lines (battalions in close line), and line of battalions in column of company close lines.

Of these formations, the column of squads is the only one that has any application in campaign. The battalions are extended and deployed in special formations required by the situation.

The line of masses is the ordinary formation for regimental ceremonies.

The line of battalion columns, column of masses, column of battalion close lines, and line of battalions in column of company close lines are employed in ceremonies of large commands (see paragraph 1025). These formations are described for convenience in designating the method of forming large commands for ceremonies and for reference when required. They have no other value.

Plate V amended as shown in revised Plate V, page 7.



designated, when in line, as right, center, or left battalion; when in column, as leading, center, or rear battalion. These designations apply to the actual positions of the battalions in line or column.

289. Except at ceremonies, or when rendering honors, or when otherwise directed, battalions and special units march at ease or at route step and stand at ease or at rest.

290. Unless otherwise directed, the battalions are posted from right to left, or from head to rear, according to the rank of the battalion commanders, the senior on the right or at the head.

291. The formations of the regiment (Pl. V) are: Line of masses (battalions in line of masses), line of battalion columns (battalions in column of masses), column of squads, and column of masses (battalions in column of masses).

Of these formations, the column of squads is the only one which has any application on campaign. The battalions are extended and deployed in special formations required by the situation.

The line of masses is the ordinary formation for regimental ceremonies. The line of battalion columns and the column of masses are employed in ceremonies involving larger units than the regiment.

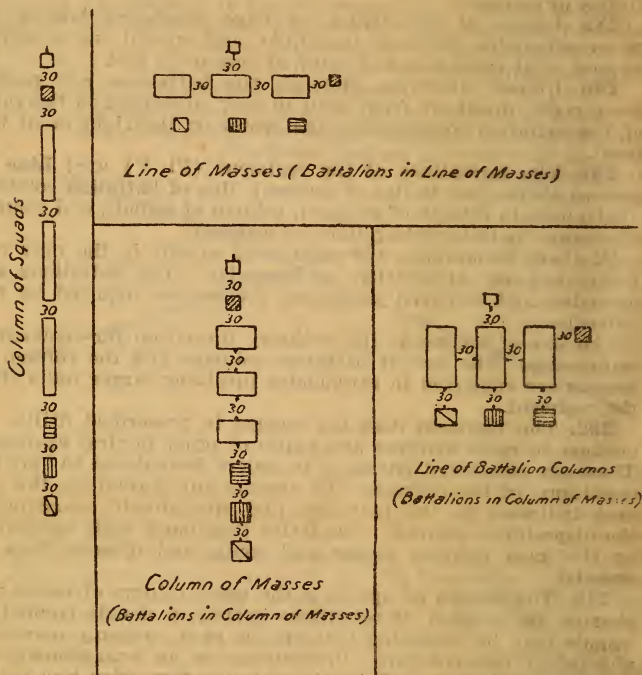
292. The regiment does not engage in prescribed drills. It engages in route marches and battle or other tactical exercises. These are conducted pursuant to orders formulated to suit the conditions of the exercise. To assume any formation, the colonel indicates to the battalion and special-unit commanders the dispositions desired. The latter then move their commands by the most suitable means and route, and dispose them as ordered.

293. The column of squads is the usual column of march; to shorten the column, if conditions permit, a double column of squads may be used, the platoons of each company marching abreast in two columns. Preliminary to an engagement, the regiment or its units will be placed in the formation best suited to its subsequent tactical employment.

294. Route marches will not be preceded by a formal assembly of the regiment. Battalion and special-unit commanders will be informed of the hour of starting and the initial point, and will be responsible for having their commands in readiness to take their places in the column at the prescribed time and place. A calculation of the elements of time and space will enable commanders to determine when their commands must leave their quarters, camp, or billets in order to reach the initial point at the proper time. All commanders are strictly

INFANTRY DRILL REGULATIONS.

enjoined against ordering an assembly at such an hour as will entail any considerable waiting in ranks, either before or after arrival at the initial point.



Colonel (with staff etc.) Machine-Gun Company

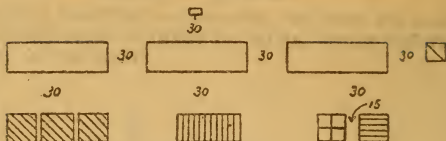
Band Supply Company

Headquarters Company (less Band)

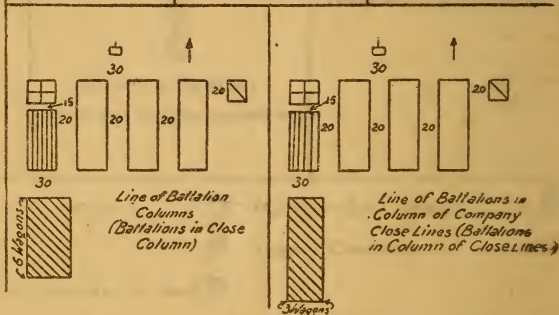
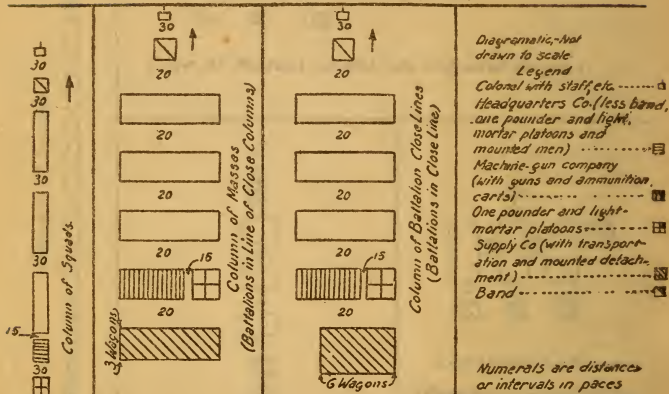
The Color accompanies Center Battalion. Numerals are distances or intervals in paces. Mounted Detachment when formed is 10 paces in rear of Supply Company.

PLATE - V

Formations of the Regiment.



Line of Masses
(Battalions in Line of Close Columns)



295. For regimental ceremonies, the regiment is formed in line of masses.

The adjutant posts himself so as to be 6 paces to the right of the right company of the right battalion when the regiment is formed and faces in the direction in which the line is to extend. Adjutant's call is sounded; the band plays.

The adjutant indicates to the adjutant of the right battalion the point of rest and the direction in which the line is to extend, and then takes post facing the regiment midway between the post of the colonel and the center of the regiment. Each of the other battalion adjutants precedes his battalion to the line and marks its point of rest.

The battalions, arriving from the rear, each in line of ~~masses~~ ^{CLOSE Columns}, are halted on the line successively from right to left in their proper order and places. Upon halting each major commands: 1. Right, 2. **DRESS**. The battalion adjutant assists in aligning the battalion and then takes his post.

The band, arriving from the rear, takes its place in line when the right battalion has halted; it ceases playing when the left battalion has halted. The special units take their places in the line when the battalions in rear of which they are to be posted have halted.

The colonel and those who accompany him take post.

When all parts of the line have been dressed, and officers and all others have reached their posts, the adjutant commands: 1. Present, 2. **ARMS**. He then turns about and reports to the colonel: "Sir, the regiment is formed"; the colonel directs the adjutant: "Take your post, Sir," and brings the regiment to the order. The adjutant takes his post, passing to the right of the colonel.

TO DISMISS THE REGIMENT.

296. Being in any formation: **DISMISS YOUR BATTALIONS**. Each major marches his battalion off and dismisses it.

CHAPTER II.

INFANTRY WEAPONS.

RIFLE AND BAYONET.

297. In spite of the addition of numerous auxiliary weapons to infantry units, the rifle is by far the most formidable weapon of the infantry soldier. Effective rifle fire is essential to victory and is the element which most frequently determines the issue of battle.

As opposed to automatic weapons, the rifle is primarily the infantry weapon for frontal fire and for use against distributed targets.

298. Training in bayonet fighting has its chief value as a factor in the development of the offensive spirit. Every infantryman must be trained to such a point that he has full confidence in his ability personally to overcome his adversary in hand-to-hand combat.

Training in rifle practice is conducted as prescribed in the Small Arms Firing Manual. Training in bayonet fighting is governed by the provisions of the Bayonet Manual.

AUTOMATIC RIFLE.

299. The automatic rifle is a rifle that fires infantry ammunition on the automatic principle and in which the recoil is supported by the body of the firer.

Its principal characteristics are as follows:

(1) It can act only by means of fire. It can not therefore make an enemy give up an intrenched line. The power of driving an enemy from trenches belongs preeminently to the bayonet and the grenade.

(2) Rapid production of a large volume of concentrated fire. The greatest value is therefore obtained from its fire when it is delivered in a flanking direction.

(3) Narrow front and shallow depth from which a large volume of fire can be delivered by a few men.

This characteristic enables the automatic rifle to meet an attack from any direction with little or no movement or exposure. A sudden attack from the flank can be dealt with at once. This indicates the usefulness of the automatic rifle on a flank, in a detached post, in a salient, or for engaging in an

enveloping attack; it can carry out these missions without increasing its vulnerability to enfilade fire as would be the case with riflemen if a number of rifles sufficient to produce the same fire effect were employed for the same purpose. In this way it also enables an infantry unit to meet an attack on its flank without change of formation.

(4) Invulnerability. An automatic rifle in action offers a small target, is difficult to locate, and still more difficult to hit. It occupies one twenty-fifth of the frontage of 25 riflemen and delivers the same volume of fire. Invulnerability depends largely on invisibility. On the defensive, automatic rifles are therefore preferably placed outside of fire and communicating trenches, and their firing position is frequently changed.

(5) Mobility. Its mobility is the same as that of the rifleman and is superior to that of the machine gun. It is therefore pre-eminently the automatic weapon for use in the offensive by the assaulting waves.

In certain very restricted cases fire can be delivered while advancing. Marching fire is, however, practicable only against a clearly defined line at ranges less than 200 yards. Such targets may be obtained in position warfare, but the use of marching fire in open operations will be unusual. Marching fire may sometimes be employed to advantage to cover a methodical advance through dense woods.

(6) Its dispersion is less than that of an equal volume of rifle fire. Accuracy of range estimation is therefore of relatively greater importance.

Due to vibration and other causes, the dispersion of the weapon when fired automatically is, however, greater than that of a single rifle. When used as a semiautomatic (single-shot) weapon, its dispersion is practically the same as that of the rifle. Except when an unusually favorable target offers and at critical periods of combat where a large volume of fire is required, semi-automatic action should be used.

(7) Unsuitability for indirect or overhead fire. This class of fire is a function of the machine gun.

300. In the offensive, automatic rifles should be used by covering detachments in the combats necessary to develop the enemy's position in the earlier stages of the fight and by the assaulting units to gain fire superiority in the later stages. Patrols of more than three men should habitually include an automatic rifle. Outguards should always have an automatic rifle. These results can best be obtained by making the auto-rifleman a permanent member of each infantry squad.

On the defensive, automatic rifles are used for flanking or covering the probable avenues of approach that can not be covered by machine guns. In the main line of resistance they

are used to supplement the fire of machine guns; by reason of their superior mobility they are used in preference to machine guns in advance of the line of resistance of the outpost zone.

MACHINE GUNS.

301. The machine gun is a weapon that fires infantry ammunition on the automatic principle and in which the recoil is supported by some sort of fixed mount and the direction of fire is capable of being clamped.

The machine gun possesses all of the characteristics of the automatic rifle except mobility, and in addition that of a fixed mount and capacity for sustained fire for long-continued periods. The fixed mount eliminates errors in holding, permits of the concentration of fire by close grouping, increases the safety of overhead fire and effect at long ranges, and permits of the accurate observation of fire effect. The machine gun is therefore especially adapted to the purposes of long-range fire, where range estimation is uncertain and the strike of rifle bullets can seldom be observed. The fixed mount also increases the adaptability of the weapon for night firing as it enables the gun to be laid by day and used by night for commanding avenues of approach, sweeping parapets, and enfilading a definite line. The fixed rest decreases the dispersion but requires a more accurate determination of the range.

By virtue of its capacity for sustained fire for long-continued periods the machine gun is preeminently the automatic weapon for use in the defense, where the ammunition supply is practically unlimited.

In respect to mobility the machine gun is inferior to the automatic rifle. It can, however, go anywhere a man on foot can go, though at a slightly slower rate, and can thus support infantry on any kind of terrain. Machine guns are therefore particularly valuable as a mobile reserve to strengthen threatened points, fill gaps, and meet unexpected situations.

The liability to accidental cessation of fire requires machine guns generally to operate in pairs.

The noise and flash of discharge facilitate the location of the gun and draw hostile artillery fire. In defense alternative positions should therefore be selected.

GRENADES.

302. The grenade is a weapon used by the infantry soldier as a supplement to his primary weapon, the rifle and bayonet. Training in the use of grenades is to be regarded as supplementary and subsidiary to training in rifle practice. Men will

not be especially designated nor exclusively employed as bombers or rifle grenadiers.

HAND GRENADES.

303. The characteristics of the hand grenade are:

(1) Curved trajectory. This quality indicates its principal function as a weapon to kill the enemy sheltered behind cover or underground or to force him into the open where he will become a target for the rifle and machine gun.

(2) An effective rate under favorable conditions of 10 grenades per minute. This enables a few men to put down an almost impassable barrage on dead ground.

(3) A radius of action varying from 20 to 100 yards, depending on the type of the grenade. The short range of the grenade prevents the use in open warfare of grenades having a large radius of action.

(4) Relatively considerable weight of the projectile, limiting the number which can be carried by the soldier and thereby diminishing its value as an offensive weapon, except for operations involving a slight advance. The difficulty of supply largely disappears in the defense.

(5) Short range; an average effective range of from 30 to 40 yards may be reckoned on. It is therefore of limited value in the attack against machine guns and other open-warfare objectives; in position warfare where there is often dead ground at close range of the objective, it is useful in cleaning up trenches, assisting in the advance through the enemy's trench system, and in village fighting.

(6) Capability of application as an agency for creating a smoke screen. When so used, special types of grenades may be used to conceal troop movements by creating a frontal or flank screen.

(7) Adaptability for use as a vehicle for lachrimatory or irritating gases which can be employed to render dugouts untenable.

(8) Incendiary effect (special types).

In general, the characteristics of the hand grenade indicate its use as a weapon for defense, for minor attacks and raids, and for cleaning up in the preliminary stages of an offensive in position warfare.

RIFLE GRENADE.

304. The powers and limitations of the rifle grenade are the same as those of the hand grenade except in respect to the following:

(1) Range. The rifle grenade can be fired at ranges of from 30 to 200 yards. It is thus capable of extending the radius of

action of the hand grenade. Its increased range makes it of value in open warfare for combating machine-gun nests and strong points and in covering the advance of assaulting troops. Due to the inferior limit of its range, it can not replace the hand grenade in hand-to-hand combat in trenches.

(2) Adaptability to fire from a fixed rest. Due to this property, which enables the fire to be accurately registered, it is preeminently adapted for the purposes of harassing fire in position warfare on objectives such as sentry posts, exits of shelters, enemy assembly points for attack, junctions of communicating trenches.

(3) Considerable weight, rendering supply difficult in offensive operations and requiring great economy in expenditure.

Two types of rifle grenades are used—high explosive and phosphorous.

1-POUNDER GUN.

305. The characteristics of the 1-pounder gun are:

(1) Its mobility and the small space required for its ammunition, which allow it to follow the infantry in any phase of combat.

(2) The ease with which it can be hidden behind a parapet or sunk into the soil.

(3) Ability to deliver masked fire.

(4) The great ease with which it is adjusted and regulated.

(5) Its great accuracy, which allows it to make direct hits upon embrasures up to 1,200 meters and gives it a useful range of 1,500 meters.

(6) The rapidity of its fire, which, during a short burst, may attain a rate of 20 rounds per minute.

(7) Great visibility of flash of discharge, which permits its location to be easily determined, especially at night, unless proper measures are taken for concealing it. It is always advisable to prepare a number of masked positions which enable the gun to avoid registration by the hostile artillery.

306. Its percussion, high-explosive shell is used against troops and matériel, its steel shell against armor. It has little effect against earth shelters. It is primarily designed to destroy by direct fire any machine gun which can be definitely located. For this purpose it is the most efficient single weapon in the infantry regiment. It is also an effective antitank gun.

LIGHT MORTAR.

307. The principal characteristics of the light mortar are:

(1) Limiting ranges of 100 and 1,800 yards. Its most effective range is obtained when the piece is fired at an angle of 45

degrees. The effective range of the mortar indicates its employment in close support of the infantry. On the defensive in position warfare, its weakness when thus employed lies in the fact that the area in which it is emplaced will be constantly subjected to a heavy artillery fire. By carefully noting the normal methods of fire employed by the enemy it will, however, usually be found possible to avoid hostile fire effect and employ the mortars effectively. They should not, as a rule, be employed close to the front line but should rather be distributed, like the machine guns, over the whole battle area within their range so as to be able to fire to the front and also against as many points as possible in our own positions.

Due to their closer proximity to the infantry engaged in the same battle sector, the light mortars are often better able to adapt themselves to any momentary changes in the struggle and to take quicker advantage of favorable opportunities than the artillery posted at a great distance to the rear. In position warfare they are indispensable in the preparation and support of our own minor operations and for the repulse of hostile operations.

(2) Considerable radius of action as compared with the one-pounder gun. Due to this quality, it is used in preference to the latter against targets such as concealed machine guns, which can not be definitely located.

(3) Dispersion less than that of the field gun. It can therefore engage targets which are too close to our own lines to be destroyed by artillery.

(4) Curved trajectory. It is therefore adapted to fire against targets on reverse slopes or under cover. For this purpose it will often prove more effective than artillery.

(5) Considerable weight of ammunition. This quality lessens its value in mobile operations and requires that great economy in the expenditure of ammunition be practiced during such operations and that the system of supply be carefully organized.

(6) Great rapidity of fire. This quality renders the light mortar particularly valuable for barrage and annihilating fire in position warfare where abundant ammunition is available. In mobile operations the rapidity of fire of the light mortar is to a great extent neutralized by the difficulty of ammunition supply.

(7) Capability of being accurately registered on objectives within the enemy's line. It is therefore adapted to the purposes of harassing fire in position warfare.

The light mortar fires two types of shell, high explosive and phosphorus.

CHAPTER III.

COMBAT.

GENERAL.

308. These regulations deal with the principles of tactical employment of infantry units and of auxiliary arms and special units placed under the orders of infantry commanders for combat. In regard to the latter, only so much is included as relates to the tactical dispositions which infantry commanders must make to coordinate the action of attached auxiliary arms and special units with that of the infantry. The detailed tactics of such arms and units are regulated by the manuals and regulations of the several arms and services.

309. The engagement of numerically superior forces does not in itself insure victory. Discipline, leadership, skill in use of weapons and ground, and above all superior resolution are the conditions essential to success.

310. Modern combat demands the highest order of training, discipline, leadership, and morale on the part of the infantry. Complicated maneuvers are impracticable; efficient leadership and a determination to win by simple and direct methods must be depended upon for success.

311. The duties of infantry are many and difficult. All infantry must be fit to cope with all conditions that may arise. Modern war requires but one kind of infantry—good infantry.

312. The infantry must have the tenacity to hold every advantage gained, the individual and collective discipline and skill needed to master the enemy's fire, and the determination to close with the enemy in attack; and to meet him with the bayonet in defense. Infantry must be trained to bear the heaviest burdens and losses, both of combat and march. Good infantry can defeat an enemy greatly superior in numbers but lacking in training, discipline, leadership, and morale.

313. It is impossible to establish fixed forms or to give general instructions that will cover all cases. Officers and non-commissioned officers must be so trained that they can apply suitable means and methods to each case as it arises. Study and practice are necessary to acquire proper facility in this

respect. Theoretical instruction can not replace practical instruction; the former supplies correct ideas and gives to practical work an interest, purpose, and definiteness not otherwise obtainable.

314. After the mechanism of extended-order drill has been learned with precision in the platoon, every exercise should be, as far as practicable, in the nature of a maneuver (combat exercise) against an imaginary, outlined, or represented enemy.

Platoon extended-order drill may be conducted without reference to a tactical situation, but a combat exercise, whatever may be the size of the unit employed, should be conducted under an assumed tactical situation.

315. An effective method of conducting a combat exercise is to outline the enemy with a few men equipped with flags. The umpire or inspector states the situation, and the commander leads his troops with due regard to the assumptions made.

Changes in the situation, the results of reconnaissance, the character of artillery fire, etc., are made known to the commander when necessary by the umpire or inspector, who, in order to observe and influence the conduct of the exercise, remains in rear of the firing line. From this position he indicates, with the aid of prearranged signals, the character of the fire and movements of the hostile infantry. The signals are intended for the men outlining the enemy. These men repeat the signals; all officers and men engaged in the exercise and in sight of the outlined enemy are thus informed of the enemy's action, and the exercise is conducted accordingly.

Assistant umpires, about one for each platoon in the first line, may assist in indicating hostile fire and movements and in observing the conduct of the exercise.

An outlined enemy may be made to attack or defend.

Situations should be simple and natural. During or after the exercise the umpire or inspector should call attention to any improper movements or incorrect methods of execution. He will prohibit all movements of troops or individuals that would be impossible if the enemy were real. The slow progress of events to be expected on the battle field can hardly be simulated, but the umpire or inspector will prevent undue haste and will attempt to enforce a reasonably slow rate of progress.

The same exercise should not be repeated over the same ground and under the same situation. Such repetitions lead to the adoption of a fixed mode of attack or defense and develop mere drill masters. Fixed or prearranged systems are prohibited.

CHAPTER IV.

OFFENSIVE COMBAT.

1. GENERAL PRINCIPLES.

316. The infantry must take the offensive to gain decisive results. Both sides are therefore likely to attempt it, though not necessarily at the same time or in the same part of a long battle line.

In the local combats which make up the general battle, the better endurance, use of ground, fire efficiency, discipline, and training will win. It is the duty of the infantry to win the local successes which enable the commanding general to win the battle.

317. An infantry that knows how to attack will know how to defend, because it is easier to defend than to attack. While training in the duties of covering detachments and in defensive measures generally will not be neglected, such training must not be emphasized at the expense of the more important combat training. All training should aim at developing positive qualities of character and action rather than encouraging negative traits. The basis of training will be the attack.

318. The infantry attack has as its basis the fighting spirit and aggressiveness of officers and noncommissioned officers with fearless, intelligent leading on their part, and the individual initiative of the private soldier himself. It is the special duty of all leaders to stimulate and cultivate these qualities and to develop discipline and self-confidence, individual vigor, and fighting capacity in order to establish and maintain the moral value of the infantry.

319. The primary duties of infantry commanders in combat are to maintain direction on their objectives, establish and maintain contact with the units on their flanks, and keep the higher command informed as to the situation. The posts of commanders and their message centers should be chosen with reference to these requirements.

Before entering an action the commander should be as far to the front as practicable in order that he may personally see the situation, order the deployment, and begin the action strictly in accordance with his own wishes.

During the action he must, as a rule, leave to the local leaders the detailed conduct of the assaulting troops, posting himself either with his reserve or in such a position that he is in constant, direct, and easy communication with it.

When their troops are victorious, all commanders should press forward to clinch the advantage gained and to use their reserves to the best advantage.

320. There is no situation which can justify a commander for remaining in ignorance of the situation on his front. The necessity for communication with the rear must not so tie him to a fixed post as to prevent him from keeping in touch with the situation by personal reconnaissance or from exercising his direct personal influence on the troops in action. The requirements of intercommunication should be met by a properly organized report and message center which, during the absence of the commander, is under charge of an officer competent to carry into effect the orders of superior authority.

321. Infantry has two general methods of action—fire and movement.

Fire must be used to cover all movement in the presence of the enemy, not masked by cover, darkness or fog.

Movement has as its object the gaining of such a position relative to the enemy as will permit of the development of a fire superior to that of the enemy, either by virtue of its direction (flanking or from the rear) or its volume (enveloping action).

322. The movement of units in the advance to the attack should be by bounds, i. e., successive positions along the axis of movement are selected as intermediate objectives and reconnoitered prior to occupation. The objects of the advance by bounds are:

(1) To preserve the direction of the advance.

(2) To gain possession of the points of the terrain which will constitute supporting points for a further advance.

(3) To locate positions affording cover and determine the most suitable routes of advance thereto.

323. Surprise is an essential element of a successful attack. In small, as well as large operations, the effect of surprise should constantly be striven for. This effect is attained by concealment of the place or time of attack, coupled with rapidity of maneuver. Concealment of the point of attack permits the offense to concentrate superior forces and gain the time required for the prosecution of a sustained offensive before its action can be countered by a hostile concentration. Concealment of the time of attack favors the moral effect which is the essence of all offensive action and prevents the defense from taking timely counter measures.

324. The effect of surprise must be reinforced and exploited by fire superiority. The advance can dispense with fire protection only when covered by darkness, fog, or smoke.

325. The success of any operation undertaken by a unit depends in a large measure on the degree to which subordinate units lend each other mutual support. While for the purposes of the orderly development of an operation, it is necessary to assign zones of action to units, such assignment must in no sense be construed as preventing them from operating outside the limits of such zones for the purpose of supporting the action of adjacent units when this can be done without abandoning their primary mission and the tactical situation requires it.

The principle of mutual support is of especial application to units in support and reserve which have not yet been committed to action.

326. The critical points of a hostile defensive system are in general those points which afford extended observation, either over the defensive zone and its rear or the ground over which the attack must advance, and those points which control the communications of the defensive zone (road centers, villages). Such points are the especially important objectives of the attack.

327. When officers and men belonging to fighting troops leave their proper places to carry back, or to care for, wounded during the progress of the action, they are guilty of skulking. This offense must be repressed with the utmost vigor.

2. COMBAT RECONNAISSANCE.

328. Combat reconnaissance is of vital importance and must not be neglected. By proper preliminary reconnaissance, deployments on wrong lines or in a wrong direction, and surprises may generally be prevented.

329. Troops deployed and under fire suffer greatly when enfiladed. Troops in close-order formation may suffer heavy losses in a short time if subjected to hostile fire. In both formations, troops must be protected by proper reconnaissance and warning.

330. The difficulty of reconnaissance increases in proportion to the measures adopted by the enemy to screen himself.

The strength of the reconnoitering party is determined by the character of the information desired and the nature of the hostile screen. In exceptional cases, as much as a battalion may be necessary in order to break through the hostile screen and enable the commander or officer in charge to reconnoiter in person.

A large reconnoitering party is conducted so as to open the way for small patrols, to serve as a supporting force or rallying point for them, and to receive and transmit information. Such parties maintain signal communication with the main body if practicable.

331. Each separate column moving forward to deploy must reconnoiter to its front and flanks and keep in touch with adjoining columns. The extent of the reconnaissance to the flank depends upon the isolation of the columns.

322. Before an attack, a reconnaissance must be made to determine the enemy's position, the location of his flanks, the character of the terrain, the nature of the hostile field works, etc., in order to prevent premature deployment and the resulting fatigue and loss of time.

It will frequently be necessary to send forward a thin skirmish line in order to induce the enemy to open fire and reveal his position.

333. It will frequently be impossible to obtain satisfactory information until after the action has begun. The delay that may be warranted for the purpose of reconnaissance depends upon the nature of the attack and the necessity for promptness. For example, in a meeting engagement, and sometimes in a holding attack, the reconnaissance may have to be hasty and superficial, whereas in an attack against an enemy carefully prepared for defense there will generally be both time and necessity for thorough reconnaissance.

334. Reconnaissance continues throughout the action.

An assaulting echelon can take care of its front, but its flanks are especially vulnerable to modern firearms. The moral effect of flanking fire is as great as the physical effect. Hence, combat patrols to give warning or covering detachments to give security are indispensable on exposed flanks.

335. The fact that cavalry patrols are known to be posted in certain directions does not relieve infantry commanders of the responsibility for reconnaissance and security.

To be surprised by an enemy at short range is an unpardonable offense.

336. The commander of a unit on a flank of a general line invariably provides for the necessary reconnaissance and security on that flank unless higher authority has specifically ordered it. In any event, he sends out combat patrols as needed.

Where the unit is on a flank of one section of the line and a considerable interval lies between the unit and the next section, he makes similar provision. In anticipation of the occurrence of gaps between attacking units, strong combat patrols are usually detailed by battalions and larger units prior to engage-

ment for the purpose of maintaining tactical contact with adjacent units.

Organization commanders in the first line establish patrols to observe and report the progress or conduct of adjoining troops when these can not be seen.

3. ORDERS.

337. Commands are deployed and enter the combat by the orders of their commanders.

338. The amount of detail to be included in combat orders will depend largely upon the amount of time available for preparation of the attack. In any case, the error of anticipating a course of events by detailed prescriptions as to action to be taken in certain contingencies will be carefully avoided. Simplicity and the elimination of data unnecessary to the execution of the missions of subordinate commanders should be striven for.

339. In general, orders should set forth the plan of attack in the following form, such subheads and details as are unnecessary or inapplicable in the particular situation being omitted:

(1) Information of the enemy and supporting troops.

(2) General plan of attack: Mission and objectives of next higher unit, of the unit concerned, and of neighboring units.

(3) Detailed tactical dispositions:

(a) Organization for attack: Assignment of units to assaulting, support, and reserve echelons, cleaning up waves, and at the disposition of higher commanders; position and frontage of each unit at place of formation for attack; formation, intervals, and distances; designation of base unit.

(b) Objectives or tasks of each unit, assignment of direction (compass bearing and distant direction point) to units.

(c) Method of advance: Artillery, tank, machine-gun, 1-pounder, and light-mortar support; barrage time table; use of scouts when creeping barrage ceases or does not exist; combat patrols.

(d) Intercommunication: Within the unit; with adjacent units; with higher commanders; use of signal troops and runners. With airplanes: Marking out the front line with panels or flares. Use of signal fireworks.

(4) Administrative arrangements:

(a) Supplies: Establishment of depots of ammunition, fire-works, water, and miscellaneous matériel (tools, barbed wire, sand bags); use of combat and field trains; carrying parties; dress, equipment, and pack of men.

(b) Medical service: Location of first-aid stations, dressing stations, etc.

(c) Prisoners: Measures to be taken; assembly points, etc.

(5) Location of commander or message center.

340. The initial combat orders may be given verbally or in writing. In the former case subordinates for whom they are intended are assembled, if practicable, at a place from which the situation and plan can be explained.

Verbal orders should be framed with the clearness, order, and conciseness of properly conceived written orders.

341. Orders transmitted by telephone should be in the same form as written messages. The tendency to allow telephonic orders to degenerate into indefinite conversational exchanges must be carefully avoided. In general, better results will be obtained when messages are written out in regular form and delivered to telephone operators for transmittal.

342. When issuing orders, a commander should indicate what is to be done by each subordinate, but not how it is to be done. He should not encroach upon the functions of a subordinate by prescribing details of execution unless he has good reason to doubt the ability or judgment of the subordinate and can not substitute another.

Although general in its terms, an order must be definite and must be the expression of a fixed decision.

4. DEPLOYMENT.

343. Units are deployed in depth and in frontage. These two factors are mutually interdependent. Units which are required to make a slight advance are deployed in relatively slight depth and may therefore be assigned an extended frontage. On the other hand, units of whom a considerable penetration is required must be deployed in a relatively great depth. As a general rule a definite frontage is assigned to an attacking unit; from the frontage assigned other factors such as the nature of the terrain being also considered, the unit commander should be able to deduce the depth of deployment and dispose the component parts of his command accordingly.

344. The depth of deployment will vary greatly along the front of an attacking force. Where the maneuver to be executed involves penetration of the hostile front, it will generally be greatest at those points that most favor the advance and least in front of points which are naturally strongest and most difficult of reduction. If the maneuver be one of envelopment, the greatest depth will exist on the flank in extension of which the envelopment is to take place; fronts which have only a holding or supporting mission attack in relatively slight depth and great extension.

345. To gain decisive results, it will generally be necessary to use all the troops at some stage of the combat. But in the beginning, while the situation is uncertain, care should be taken not to engage too large a proportion of the command. In the original deployment, the strength of the reserve held out by each commander may comprise from one-sixth to two-thirds of his unit.

In addition to the necessity of holding out reserves for the purpose of meeting unexpected emergencies, the strength of reserves is controlled by the relation of depth and frontage as set forth in paragraph 343.

346. The density of the whole deployment increases with the size of the command because the larger the command the greater the depth of deployment. Thus a battalion acting alone may attack with two men per yard of front, but a regiment with three battalions may only double the front of one battalion.

347. In the deployment, its companies establish the assaulting echelon, each furnishing its own support. In each unit larger than a company a reserve is held out.

The function of the support is, in principle, the reinforcement of the assaulting echelon and the protection of its flanks. Reinforcement may take place by increasing the density of the echelon or filling up gaps or by prolongation of the echelon (enveloping action).

Reserves are primarily maneuvering bodies whose rôle is the outflanking of points of resistance developed by assaulting echelons, the continuation of the action of assaulting echelons when these become exhausted, and the taking in flank of resistances holding out in front of adjacent units.

348. When the deployment can be made deliberately, under the protection of troops already in position, units are conducted to predetermined places of deployment and formed for attack, usually under the cover of darkness. Silence and order in forming up are indispensable.

349. Troops are massed preparatory to deployment when the nature of their deployment can not be foreseen, or it is desirable to shorten the column or clear the road.

350. Where time does not permit of a deliberate deployment regulated in detail, large commands are ordinarily first formed into line of columns to facilitate the extension of the front prior to deploying. These columns march on assigned direction lines and take up an approach formation as soon as they enter the zone of the enemy's artillery fire. In approach formation, distances and intervals should be so regulated that no two elements can be taken under the burst of the same hostile shell.

351. During the approach march, systematic reconnaissance is carried out with a view to locating shelled areas. Such areas and other points such as villages, defiles, small woods, etc., likely to have been registered by hostile artillery, are avoided. These considerations are more important than considerations of cover.

352. The approach march is conducted in a series of bounds; the column directs its march successively from one to another of a series of successive points which define the route of advance. The advance is conducted under the protection of covering detachments. Protection against low-flying airplanes is assured by assignment of machine guns to antiaircraft missions.

353. Where practicable, the infantry moves across country, leaving the roads free for traffic.

354. Each subordinate commander, after receiving his order for action, should precede his command as far as possible in order to reconnoiter the ground personally, and should prepare to issue his order promptly. Each commander of a first-line battalion should reconnoiter and locate a position under cover of which the battalion can be formed for attack and objectives assigned to companies.

355. The premature deployment into combat formation causes unnecessary fatigue and loss of time, and may result in a faulty direction being taken. Troops once deployed make even minor changes with difficulty, and this difficulty increases with the frontage of the echelons.

356. In the larger units, when the original deployment is found to be in the wrong direction, it will usually be necessary to deploy reserves on the correct front and withdraw and assemble the leading echelon.

357. When practicable, direction lines should be maintained by compass bearings. Where landmarks only are assigned, misunderstandings will frequently arise, and units will be found attacking obliquely across the line of advance of other troops. This results in troops being crowded in some areas while other areas remain vacant.

With the proper use of the compass, no difficulty will be encountered either in wooded or open country in the maintenance of proper line of advance. Painstaking training is required for both officers and men in marching across country and through timber by compass direction.

5. ADVANCING THE ATTACK.

358. Where troops are not in contact with the enemy prior to the attack, the assaulting echelon must ordinarily advance

a long distance before it is justified in opening fire. It can not combat the enemy's artillery, and it is at a disadvantage if it combats the defender's long-range rifle and machine-gun fire. Hence it ignores both, and by taking full advantage of cover and of the discipline of the troops, advances to a first firing position at the shortest range possible.

359. At long range, the best protection of advancing troops against loss consists in their own movement and the utilization of cover from view. It should be impressed on all ranks that cover alone does not diminish losses, but that their best protection consists in the most rapid possible advance to a point where they can make most effective use of their own weapons. By clinging to cover and opening fire at long range, they play into the enemy's hands by engaging in a fire fight in which they are at a relative disadvantage, and moreover constitute a stationary target upon which his artillery can easily range.

It will sometimes be necessary to cross fire-swept zones by the advance of individuals who work their way forward separately and re-form on a designated position.

360. It will frequently become necessary for infantry moving to the attack to pass through deployed artillery. This should be done so as to interfere as little as possible with the latter's fire, and never so as to cause that fire to cease entirely. As far as practicable, advantage should be taken of intervals in the line. An understanding between artillery and infantry commanders should be had, so as to effect the movement to the best advantage.

6. THE FIRE ATTACK.

361. When the effectiveness of hostile fire makes it impossible for the assaulting troops to progress without opening fire, they must continue their advance under the protection of their own fire, the fire of artillery and machine guns, and that of the accompanying weapons.

362. At the first firing position, attacking units seek to gain fire superiority over the opposing resistances. This may necessitate a steady, accurate fire for a long time. The object is to subdue the enemy's fire and keep it subdued so that the attacking troops may advance from this point to a favorable place near the enemy from which the assault may be delivered.

363. Assaulting units advance from one cover or firing position to another by successive rushes, the movement of advancing fractions being covered by the fire of those remaining in position. Diminution of the enemy's fire and a pronounced loss in effectiveness are the surest signs that fire superiority has been gained and that a part of the attacking group can ad-

vance. Enough rifles must be continued in action to keep down the enemy's fire; this determines the size of the fraction rushing.

364. Every lull in hostile fire is utilized to push groups to the front and occupy the natural strong points of the terrain from which covering fire, particularly that of automatic rifles, can be delivered to facilitate the further progress of the assaulting units.

365. The attack will not generally encounter a uniformly held, continuous line of defense. It will have to overcome a defense disposed in depth and a series of centers of resistance or strong points covering the main routes of advance, with relatively lightly held intervening intervals. By a stubborn defense of these strong points the defense will seek to limit the penetrating action of the attack and overwhelm by counterattack the assaulting elements which succeed in penetrating its front.

There will consequently be inequality in the resistance encountered on the front of attack. Certain units of considerable size will be held up in front of the stronger centers of resistance. Others, which encounter only minor resistances, press forward as rapidly as possible without regard to the progress of units on their flanks and attempt to outflank the main hostile resistances. The battle thus becomes a series of local combats carried on by units of varying importance. The combat is not carried on by continuous lines, but by groups disposed in depth and capable of acting in any direction.

366. Sections of the assaulting echelon held up are not reinforced when the resistance in their front can be outflanked. By their own fire and that of the accompanying weapons they attempt to neutralize or mask the opposing resistances and prevent them from entailing the attacking elements advancing on their flanks.

367. In principle, assaulting units endeavor to obtain superiority of fire over the defensive elements into which the hostile dispositions are broken up by enveloping action. While the assaulting echelon seeks to approach as closely as possible to the hostile position and immobilize the enemy with its fire and that of the accompanying weapons and machine guns, additional forces are brought up on the flanks to envelope the enemy or gain his rear.

The advantage of the enveloping action consists in the longer line with consequent superiority in the number of weapons in action and in convergent fire as opposed to the enemy's divergent fire. In many cases, however, the mutual flanking of hostile centers of resistance will be unfavorable to enveloping action. In such case frontal attack will be necessary.

368. Where the opposing resistance consists of isolated machine-gun nests, the precision of the accompanying weapons at close range is often sufficient to put the enemy out of action. In any event their fire will cover the advance of the infantry to close range and prepare for its assault. They may also be used to assist the infantry to outflank points of resistance by neutralizing the flank toward the infantry. In some cases this neutralization may be effected by the use of smoke barrages.

369. It is the special duty of supports and reserves during the advance to take timely measures in anticipation of hostile counterattack. They utilize all lulls in the action to occupy the natural strong points of the terrain and dispose machine guns and accompanying weapons so as to check any hostile reaction.

370. The deep disposition of attacking units does not imply a passive following of the assaulting echelon by supports and reserves. On the contrary, one of the purposes of the disposition in depth is to enable the attacking units to act in any direction. Commanders of supports and reserves must keep in touch with the situation on their front and flanks by constant reconnaissance and be ready to act on their own initiative in the execution of the various missions which the situation may impose. These missions may involve the protection of the flanks of neighboring units by the attack of counterattacking hostile forces; wheeling into an adjacent sector for the purpose of taking in flank hostile resistances still holding out; covering gaps which may arise between adjacent assaulting units. For supports and reserves, no less than for assaulting units, there is no reason for continued inaction on the battle field.

371. Supports and reserves are in principle put into action where least losses are being suffered rather than where they are greatest. All commanders must endeavor to locate the points where the enemy is offering least resistance in order to exploit any weakness he may develop by the use of troops in rearward echelons.

7. THE ASSAULT.

372. Except where the opposing troops have been in contact for a considerable time, the assault can not generally be conducted on an extended front. Inequality of the resistance and the necessity of immediately taking advantage of weakening in the hostile resistance wherever it occurs, will produce local assaults executed by small units and combat groups. The assault should be delivered by each unit at the earliest moment that promises success.

373. Where the assault is prepared by the fire of artillery, machine guns, and accompanying weapons, their fire ceases or is lifted off the objective either at a prearranged hour or by preconcerted signal (rocket).

374. After a successful assault, the situation will determine whether to follow up the enemy in pursuit or organize the position for defense against counterattack. Rapid fire should be opened on the retreating enemy if he is in sight. It is not generally advisable for units mixed and disorganized by the assault to follow the enemy. The pursuit should be immediately undertaken by the nearest organized echelons and the assaulting troops reorganized and placed in support.

375. If the assault fails, the assaulting troops must dig in and hold their ground. To attempt to withdraw would result in annihilation. If the assault is to be repeated fresh troops must be sent in as reinforcements and the fire preparation for the assault renewed.

376. Where the attack succeeds in penetrating through the defensive position on a broad front the infantry must be organized in still greater depth. Column of march is resumed as soon as the range of hostile guns permits, security detachments are sent out, and the cavalry maintains contact.

Should the cavalry or aviators discover hostile guns within range, infantry must take up an approach formation and make ready to reconnoiter and attack.

8. POSITION WARFARE.

377. The attack of a carefully prepared trench system is characterized by a powerful artillery preparation and the simultaneous launching in assault at a prescribed hour of large masses of infantry, widely deployed and organized in depth, the assaulting waves being preceded by a rolling barrage. For an attack of this kind all action is regulated down to the minutest details of time and space by superior authority. The action of all forces that take part in the attack proceeds according to prearranged schedule. The initiative of subordinates is reduced to a minimum. The essentials for success are reconnaissance to determine the precise location and nature of the enemy's defenses and the resistance to be overcome, systematic organization for the particular end in view, and methodical execution. The infantry overcomes the enemy by the mere fact of advancing.

An engagement of this kind is not the end but merely the means to an end. It has for its purpose the forcing of the

enemy into the open where his masses may be decisively attacked and destroyed.

378. Having determined the location, composition, strength, and disposition of the forces of the defense, the offense selects the point and direction for attack. On a large front it may be made against a section which is generally poorly organized, weakly held, with a few reserves, etc., which invites capture. It is generally greatly influenced by strategical considerations. Locally, the point and direction of attack is governed by tactical considerations. The main attacks may be made against weak points of the position or up valleys or ravines under cover of fog or smoke, with a view to penetrating the position and taking strong points from the flanks or rear.

379. In order that the attacking troops may close with the enemy they must gain fire superiority over the defense. The offense attempts to gain fire superiority:

(a) By a preparatory bombardment which has as its object the destruction or neutralization of important elements of the defense and the opening of lanes of advance for the infantry in the hostile accessory defenses. The fire of artillery, trench mortars, and machine guns is directed against important elements of the defense (obstacles, machine-gun emplacements, artillery emplacements, points of resistance, observation posts, command posts, dugouts, routes of communication, etc.). A long bombardment of several days duration is destructive of the effect of surprise which is necessary to the success of the attack. Such a bombardment will, moreover, never succeed in effecting a complete destruction of the enemy's defenses. The artillery preparation should therefore be limited to the extent necessary to destroy or neutralize the more important features of the hostile defense and to paralyze the action of the defending forces, with a view to exploiting the enemy's weakness by the immediate action of the infantry.

(b) During the advance to the attack, by artillery, light-mortar, and 1-pounder bombardment directed against elements of the defense which have been located or suspected, and by a timed artillery and machine-gun barrage which the infantry may follow at a distance of about 100 yards. This is supplemented by machine guns, light mortars, 1 pounders, automatic rifles, rifles, and by artillery using indirect or direct fire which support or accompany the infantry and direct their fire against points of resistance which still hold out. Sections of the advance held up add their automatic-rifle and rifle fire to the above and support the advance of the remainder. Tanks may be employed to reinforce this fire and support the infantry.

380. Protected by such natural and artificial features of the ground as may be found, and by the fire mentioned in paragraph 379 (b) above, these various echelons advance to the attack in successive waves. Each wave of the assaulting battalion usually has a strength of about one man per 5 yards of front; under cover of darkness or fog this density may be increased. When sections of the advance wave are held up, they are not reinforced for a frontal attack, but, together with light motars, machine guns, 1-pounders, and artillery, they attempt to gain fire superiority over the points of resistance of the defense and hold down their fire. The remaining sections of the advanced waves and the supports and reserves of the attack, closely following the barrage (if there be one), attempt to penetrate the position of the defense and attack the points of resistance on the flanks and rear. The infantry of the attack is thus placed not only within assaulting distance on the front of points of resistance but also on their flanks and rear. The fight then becomes an infantry combat supported by light motars, 1-pounders, and machine guns. Artillery support for a time is more or less uncertain.

381. The assault is executed by units disposed in depth. The various successive lines have taken the name "waves," but this term does not imply a uniform formation. The wave is not a rigid line advancing directly forward. Waves are formed by placing elements abreast, either in line of skirmishers or in line of small columns. These elements are thus well controlled and flexible, and are always capable of being handled at the will of the commander. The assault formation must be accommodated to the terrain and to the hostile dispositions. It is not desirable to lay down hard and fast rules as to the formations to be adopted in an attack.

382. The general attack, after the breach of a systematically defended position, splits up into a series of separate combats. Unlike the trench-to-trench attack, the details of this phase of the action can not be fixed in advance. The course of events is sure to be other than what can be foreseen, and under these circumstances, if details have been prescribed in advance, subordinate commanders will be in doubt as to whether they should strive to carry out the original plan or whether they should act on their own initiative. Freedom of action and the satisfaction engendered by responsibility will be lacking.

These separate combats must be directed by brigade and subordinate commanders within the zones of action assigned them and with the means at their disposal. Fresh hostile resistance must be quickly overrun and the enemy prevented from withdrawing his guns and reestablishing his infantry in a new position. Firm control of the troops, coordinated effort within the

units, and energetic leading are necessary for a sustained progression. The extent of the success will be measured by the initiative and boldness of the subordinate commanders and their capacity for quick adaptation to the changing conditions of combat and terrain.

383. The combat phase which follows the breach of a fortified position is characterized by the attack of hostile machine-gun nests and strong points usually echeloned in depth and disposed so as to flank the intervening intervals.

The reduction of these points and the further progress of the advance takes place in accordance with the general principles of the attack as set forth in preceding paragraphs of these regulations.

384. After cessation of, or loss of contact with, the creeping barrage, the advance of the attacking waves is covered by scouts. Their mission is to compel the hostile machine-gun nests to open fire and thus disclose their location.

9. THE PLATOON.

385. The platoon is the smallest infantry unit which is habitually deployed in depth and endowed with independent power of maneuver. It is the largest unit admitting of direct personal leadership and fire control in combat. It comprises two sections, each under a leader who, in principle, exercises direct control over his unit in all phases of battle.

386. The combat can not, however, always be carried to a finish by the original units. Temporary groups will frequently result from the incidents of the fight or the conditions of the terrain. Whenever temporary groups arise, each group, even though composed of a handful of men, must have a leader. This leader, whether he be a noncommissioned officer or private, must rise spontaneously to direct his comrades, carry them forward when they hesitate, and prevent them from giving ground. Temporary groups deploy, advance, and fire in the same way as normal units. All that is stated below with reference to the section applies equally to the group, whatever its strength.

387. Before the engagement, it is imperative that the company commander designate men to replace the leaders of platoons, sections, and squads in case of casualties, so that the assumption of command will be automatic.

LEADERS.

388. The platoon is commanded by a leader, aided by the platoon sergeant. The platoon sergeant replaces the platoon leader when the latter becomes a casualty.

389. The platoon leader commands his platoon by means of commands and signals. He is at all times responsible for the maintenance of the direction of march of his platoon and for connection with the base platoon. The integrity of the platoon is preserved by observance of the direction assigned and by maintenance of connection with the base squad.

In the advance to the attack, the platoon leader, accompanied by his runners, is sufficiently in advance of his platoon to make the reconnaissance necessary for the proper leading of his platoon. During the fire fight his position is at the head or in the center of his platoon. He is not bound to any fixed post.

When the platoon is deployed in two waves, it is the special duty of the platoon sergeant to maintain connection between the platoon leader and his second waves, to prevent the second wave from becoming prematurely merged in the leading wave, and to direct the engagement of the second wave when so instructed by the platoon leader or when the situation requires it.

390. The section leader guides his unit. He looks at it only when his exercise of control demands it—his eyes should be fastened on the enemy. The section must be bound to its leader, who, under all circumstances, is the rallying point. His bearing and his pace sets the standard for the unit.

391. At short ranges, the platoon and section leaders abstain from useless gestures, which might disclose their location to the enemy.

392. The squad leaders maintain the positions assigned them and see that the platoon and section leaders' orders are executed. They transmit the commands and signals when necessary, observe the conduct of their squads, and assist in enforcing fire discipline. When the ability of platoon and section leaders to control the action of their units ceases, squad leaders lead their squads on their own initiative, lending each other mutual support.

GENERAL PRINCIPLES OF ATTACK.

393. In either position or open warfare, the tactics of the platoon in attack resolve themselves in the majority of cases into the method of attack of tactical points. A tactical point may be described as a locality, the possession of which is of the first importance locally to either side. It may take the form of any of the following: "A strong point," a piece of ground furnishing an advantageous fire position or good observation, a bank, a hedge, a house, or any locality of limited dimensions.

The tactics to be employed may be summarized as follows:

(1) Push on to the objective with the fixed determination of getting in with the bayonet as soon as possible.

(2) If held up by a hostile resistance, open as heavy a fire as possible with a view to immobilizing the enemy and facilitating an envelopment of the resistance. Bring up units from the second wave on one or both flanks of the first wave under the protection of its fire. Movements under covering fire, especially that of rifle grenades the stock of which is limited, must be as rapid as possible. If possible, use automatic rifles to open flanking fire as soon as the best way of employing them has been determined by reconnaissance.

(3) If it is impossible, on account of flanking fire from other hostile localities situated to the flank and rear, to reduce the hostile strong point by enveloping action, prepare for a frontal attack. The aim should be to produce as large a volume of frontal and oblique fire as possible and under its protection to build up an assaulting line at close range to the hostile resistance.

(4) Opportunities to advance are often transient. Take immediate advantage of effective fire of artillery, accompanying weapons, and machine guns, or the flanking fire of adjacent platoons, to make a rush.

(5) Reinforcing a platoon which is held up does not necessarily mean thickening the line; assistance may often be more effectively given from a flank. It is always the duty of the leader to acquaint himself with the situation by personal reconnaissance before committing his platoon to any line of action.

(6) Cooperate and keep in touch with the platoons on either flank, and be on the lookout to assist them. The circumstances of the situation will determine whether this can best be done by delivering flanking fire across their front or by continuing the advance. When it is possible to outflank the hostile resistance, assistance may often be more effectively rendered by pushing ahead than by directly supporting a platoon held up; the surest means of helping a neighbor in battle is to push on.

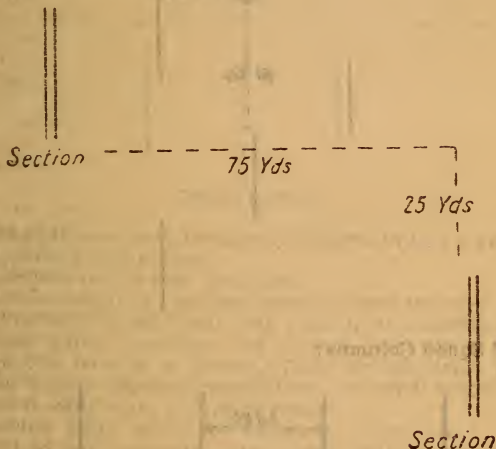
394. The rôle of the platoon and section leaders consists in combining fire with movement. The advance is made in one body if under cover, at quick time; if in the open and exposed to fire, by smaller elements employing short rushes at full speed. These can also advance by filtering over ground furnishing but little cover.

395. More attacks fail from loss of direction than from any other cause. Every platoon leader must practice himself and his section leaders in the use of the compass, selecting points such as a tree or other conspicuous object as a direction point and reconnoitering before movement whenever possible. Platoons must be practiced in crossing long stretches of ground without losing the direction of march or connection with adjacent units.

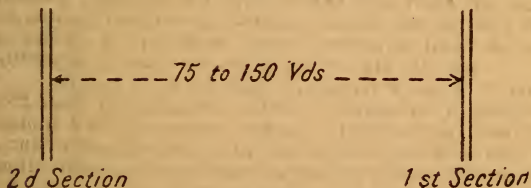
APPROACH MARCH.

396. The infantry advancing to the attack from the point where it first comes under artillery fire to its first firing position is concerned with only one question, "To reach that firing position with a minimum loss of life." In general, small columns permit better utilization of the terrain and are more easy to maneuver than skirmish lines. Hence under artillery fire only the platoon may be formed in any of the following formations:

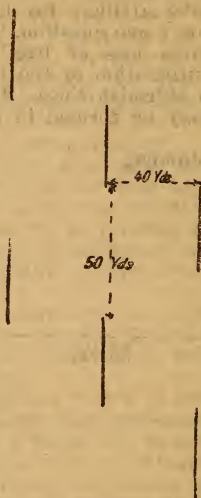
Echeloned Section Columns:



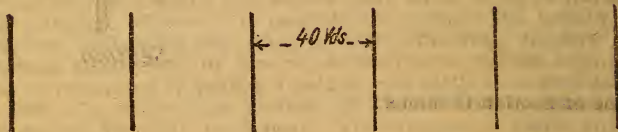
Line of Section Columns:



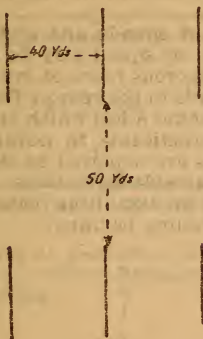
Echeloned Squad Columns:



Line of Squad Columns:



Line of Squad Columns in two waves:



DEPLOYMENT.

397. The platoon most frequently deploys in two waves, each wave comprising one section.

The functions of the rear wave are :

(a) In the assault of trenches, to strengthen the first wave in any hand-to-hand combat that may arise in the hostile position immediately after launching the assault. To carry out this mission and to be able to debouch from the departure position before the hostile barrage comes down, it must follow closely behind the leading wave (15 to 25 yards).

(b) During more open operations, to serve as a unit of maneuver and reinforcement in the hands of the platoon leader ; as such it may be employed to envelop hostile resistance or to check counterattacks. The execution of these missions require that it be at a considerably greater distance from the leading wave than during the trench-to-trench attack (50 to 150 yards).

Deployment on a wide front (two sections in line) decreases the ability of the platoon leader to control his platoon.

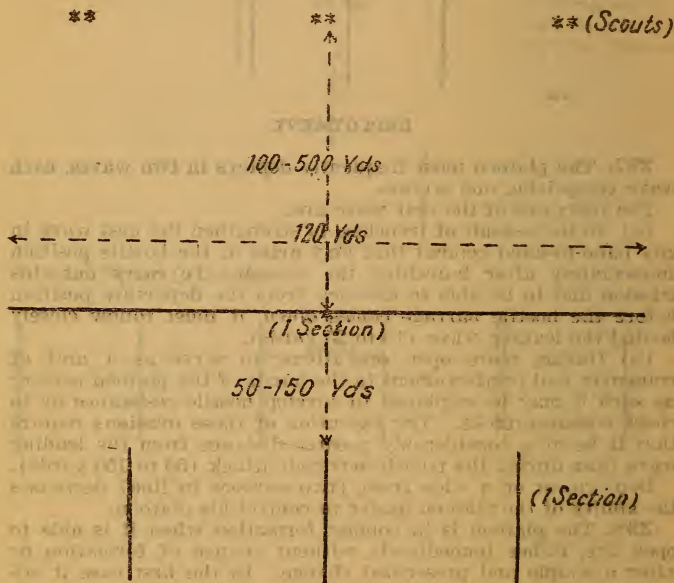
398. The platoon is in combat formation when it is able to open fire, either immediately without change of formation or after a simple and prescribed change. In the first case it advances in line of skirmishers ; in the second case it advances in line of small columns (sections or squads), with sufficient intervals for deployment as skirmishers.

These two formations may sometimes be combined. For instance, a platoon may have its leading section deployed in line of skirmishers and its rear section in line of squad columns at deploying intervals.

399. The formations of squads and sections are adapted to the terrain. One section or squad may be compelled in its advance to pass over a dangerous piece of ground in skirmish line while the section or squads to the rear or flank advance in small columns in a ravine or behind a hill which hides them completely.

400. When it is impracticable to advance further without firing, one or more waves are deployed as skirmishers. The following are examples of assault formations:

Suitable formation for an assaulting platoon advancing without the protection of a rolling barrage:



Suitable formation for an assaulting platoon advancing under protection of a rolling barrage:

←----- 120 Yds -----→

(1 Section deployed at 5 paces interval between skirmishers)

25 Yards

(1 Section deployed at 5 paces interval between skirmishers)

Suitable formation for an assaulting platoon advancing without the protection of a rolling barrage and in very rugged, wooded, or difficult terrain:

**

**

**

50-200 Yds

40 Yds

50 Yds

INFANTRY DRILL REGULATIONS.

ADVANCING THE ATTACK.

401. When closely following a moving barrage, there is seldom room for scouts. When the barrage has been lost or does not exist, as is ordinarily the case in the open field, scouts should precede the assaulting platoons. They should deploy in pairs at wide and irregular intervals, 10 to 50 yards, to present a poor target to hostile infantry and machine guns. They should take every possible advantage of the ground to obtain cover, provided their advance is not thereby unduly delayed, and cross exposed ground at a run. Their distance in front of the main bodies of their platoons follows no set rule, but constantly varies with the ground and with the position of the enemy. One moment they may be 500 yards ahead of their platoons; a few minutes later they may be absorbed therein. Their purpose is to compel the enemy infantry and machine guns to open fire and so disclose their location. When the hostile machine guns or strong points have been located, the scouts should at once open fire. In each pair, one scout covers the advance of the other with his rifle.

402. The platoon, following the scouts, crosses open stretches at a run by successive rushes. Fire-swept areas may be crossed by the successive advance of individuals at widely separated intervals who work their way forward and re-form on a designated terrain line in advance.

THE FIRE ATTACK.

403. Under cover of the fire of the scouts, enough men from the platoon work forward individually or in small groups to the thin and irregular line of scouts in order to give it sufficient fire power to pin the enemy to the ground. If the scouts are in low ground, it will sometimes be advisable for the platoon to open fire over their heads from commanding ground in rear. But the firing line, however formed, must remain a thin one, with no two men ever less than 5 paces apart, and in the usual case preferably at much greater interval. The first reinforcements for the scouts should contain one or more automatic-rifle teams. At the same time, units of the second wave begin to work around one or both flanks of the first wave to get at the flanks of the strong point and thus close on its garrison. If the fire of the defense is shifted to meet the new attack, a whole or part of the first wave should take prompt advantage of the change in position or direction of fire to rush directly forward. Riflemen using rifle grenades assist the advance by heavy fire from suitable positions behind the first wave.

404. The ability of the platoon leader is displayed by prompt reconnaissance of the ground, by a rapid estimate of what it offers toward facilitating the advance of his men, and by immediate decision upon a simple plan for the use of his combined weapons and of ground to enable him to close with the enemy. His plan should habitually include pinning the enemy to the ground by frontal and flanking fire, under cover of which some portions of the platoon, usually those sent against the hostile flanks, can close by short rushes with the enemy. The training and discipline of the platoon are shown by the skill with which the men carry out the plan of the leader.

405. Against a strong hostile resistance, the advance of the platoon at close range will generally be effected by successive rushes of fractions of the assaulting echelon. Enough weapons must continue in action to insure the success of each rush. Frequently the successive advances of the assaulting platoons must be effected by rushes of fractions of decreased size; that is, advance by rushes may first be made by section, and finally by squads or files; but no subsequent opportunity to increase the rate of advance, such as better cover or a decrease of the hostile fire, should be overlooked.

406. Whenever possible, the rush is begun by a flank fraction of the assaulting echelon. In the absence of express directions from the captain, each platoon leader determines when an advance by rushes shall be attempted.

The fractions need not be uniform in size; each platoon leader indicates how his platoon shall rush, having due regard to the ground and the state of the fire fight.

407. A fraction about to rush is sent forward when the remainder of the line is firing vigorously; otherwise the chief advantage of this method of advancing is lost.

The length of the rush will vary from 30 to 80 yards, depending upon the existence of cover, positions for firing, and the hostile fire.

408. As soon as a platoon or a section has overcome a hostile resistance its leader re-forms it rapidly, and the advance is resumed. If it be impossible to advance for the time being, the ground must under no circumstances be abandoned. The dogged resistance of small elements, clinging to the ground, will in most cases check a hostile counterattack and allow the offensive to be resumed.

409. In addition to their mission of covering the advance of the platoon, the scouts constitute the advance elements of a filtration into a gap discovered in the hostile front; they should be followed as soon as possible by automatic riflemen, and under the protection of their fire a supporting point gradually built up on the enemy's flanks and rear.

410. When penetration is effected at isolated points, these must be constituted as supporting points from which hostile fire is kept down and the enemy's line rolled up toward the flanks, and as bases of departure for a further advance.

POSITION WARFARE.

411. In a trench-to-trench attack, it is of special importance that every squad should be formed up square to its objective. The platoon leader must satisfy himself that tapes, flags, discs, or other means of indicating the method of forming up for the attack have been established, and that his section leaders understand, and have made their men understand, exactly what they have to do and how they are to advance.

412. The section in the first wave debouches from the departure trench or advances from the take-off tape at H hour and moves on its objectives without stopping to search hostile shelters.

It is essential that the advancing line keep as close as possible to the creeping barrage, and that by the rapidity and the continuity of such advance full advantage be taken of the surprise effect on the enemy. When the skirmishers meet an obstacle (such as a section of wire entanglement), they must move around it, making use of any passage that exists in the wire, trample it down, or cut a path through it.

413. When a section encounters hostile resistance, it endeavors to overcome it by combining movement and fire. The automatic rifles and the rifles fire on every exposed target and thus oblige the defenders to conceal themselves, while the hand and rifle grenades are used against objectives under cover. Rifle grenades are especially valuable for the latter purpose.

414. The second wave advances toward the objectives, preserving its distance from the first wave until the necessities of the combat demand its assistance. However, when the necessity does arise, the leader must, on his own initiative, engage his unit, wholly or in part, for the following purposes:

(a) To take part in any hand-to-hand combats in which the first wave may be engaged.

(b) To fill gaps that occur in the assaulting lines.

(c) To cooperate in surrounding any local resistance which can not be reduced by the leading wave or by neighboring units which have been delayed in their advance.

415. Combat in trenches and communicating trenches is to be avoided by assaulting platoons so long as they have not reached their final objectives. This combat is reserved for the cleaning-up units.

The training and tactical handling of such units is prescribed in the Manual for the Drill and Tactics of Hand Bombers and Rifle Grenadiers.

10. THE COMPANY.

416. The company is the smallest self-contained infantry unit capable of sustained action and including in its organization the means of making good its own losses in combat.

ADVANCE IN ROUTE COLUMN.

417. During the advance of the battalion in route column before the attack, each captain constantly observes and reconnoiters the ground so that he will at all times be able to deploy or engage his company on correct lines when the march column is broken up.

APPROACH MARCH.

418. After the extension of the battalion from route column and on approaching the zone of hostile artillery fire, the captain forms his company in a suitable approach formation or as directed by the major. He assigns a distant direction point and the compass bearing of the advance in accordance with instructions of the major, designates a base platoon, and insures that other platoons of his company conform to the movements of the base platoon during the approach. He insures conformity of the advance of his base platoon with that of the company designated as the base by the major. If his company is designated as the base by the major, his base platoon is the base of the battalion; he insures its advance in the designated direction.

If the battalion enters the zone of hostile artillery fire prior to extension, each captain forms his company in approach formation on his own initiative.

419. During the approach march all covered lines of advance are so utilized that only indistinct and fleeting targets are presented to artillery fire. Companies vary their intervals or form columns of slight frontage (files or twos) in order to take advantage of favorable approaches.

420. Where the nature of the combat formation of the company can be foreseen, the platoons are disposed in echelons corresponding to the echelons in which they will be formed for attack, and the advance is so directed that they will find themselves directly behind the positions on which they will deploy for combat. If, on the other hand, the situation is obscure,

they are so disposed that a change of formation can be readily made, i. e., in depth or in echelon.

421. During the approach march, the captain moves to points from which he can obtain the best available views and thus anticipate the course of action without, however, losing control over his company. The platoon runners insure visual connection between the captain and the platoon leaders when he leaves his company for purposes of reconnaissance. Company runners and buglers maintain communication with adjacent companies and with the major during all stages of the advance and of combat. Runners or other specially detailed men also serve as observers; designated men observe the progress of events on each flank and keep the captain constantly informed as to the location of adjacent units. Runners are trained to perform these duties automatically.

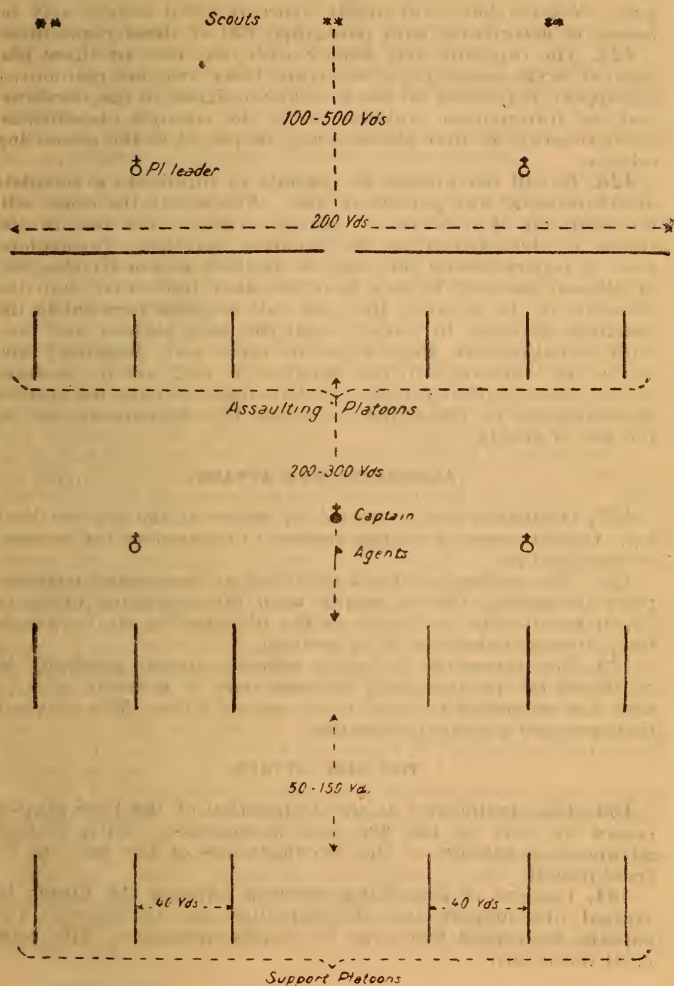
When danger of serious losses arises, the captain should be with his company.

422. Captains take the necessary measures for security and reconnaissance. When the advance is not covered by other troops, the leading companies cover their advance by scouts. These deal with any resistance encountered from hostile advanced posts and patrols. Captains reenforce them when necessary with elements from their companies and rapidly clean up the hostile points of resistance without, however, permitting the advance of their companies to be unduly delayed.

DEPLOYMENT.

423. In some cases the position selected by the major for the formation of the battalion for attack will be the same as that at which it is extended in approach formation. In such case the captain will conduct his company to a point at which it can be formed for combat and objectives assigned to platoons. Wherever possible, however, the major will direct the approach march to the most advanced position from which the attack can be launched under cover prior to entering the zone of effective small-arms fire.

424. Upon receiving his orders for combat, the captain of an assaulting company engages his company by verbal orders to his platoon leaders. He gives them the information obtained by reconnaissance concerning the enemy and all available information regarding adjacent units and our own artillery; assigns each platoon a combat mission; prescribes the formation; designates a base platoon and, when practicable, a distant direction point and compass bearing; states the location of the combat train; the battalion aid station, and his own combat



post. Where time is available, more detailed orders may be issued in accordance with paragraph 339 of these regulations.

425. The company may deploy with one, two, or three platoon(s) in the assaulting echelon, and three, two, one platoon(s) in support, depending on the frontage assigned to the company, and the information available as to the enemy's dispositions. Exceptionally, all four platoons may be placed in the assaulting echelon.

426. It will not always be possible to formulate a complete attack order at any particular time. Frequently the order will be made up of a series of partial orders given out in the course of the advance as the situation develops. Incompleteness of orders should not lead to hesitant action on the part of platoon leaders; if they have no other indication than the direction of the advance, they are able to press forward in the assigned direction in contact with the base platoon and deal with situations as they arise on their own judgment and initiative. Obscurity in the situation is met, not by hesitant action, but by sufficient depth of dispositions to meet unexpected developments, by protecting the flanks by echelonment, and by the use of scouts.

ADVANCING THE ATTACK.

427. Ordinarily fire is opened on orders of the platoon leaders. Captains may, however, reserve to themselves the moment of opening fire.

428. The position of the captain of an assaulting company prior to opening fire is usually with his assaulting platoons. When practicable, he regulates the distribution of the fire of the platoons at the first firing position.

429. The formation in small columns should generally be continued by the assaulting platoons until in order to advance they are compelled to reply to the enemy's fire. The company then assumes a combat formation.

THE FIRE ATTACK.

430. The significance of the designation of the base platoon ceases as soon as the fire fight commences. Each platoon advances as rapidly as the circumstances of the fight in its front permit.

431. Leaders of assaulting platoons advance the attack by mutual fire support and alternate fire and movement. The captain intervenes whenever he judges necessary. His principal duties are:

(a) To reinforce the assaulting platoons whenever they become depleted in strength, and to forward ammunition to them, when necessary, with the reinforcements.

(b) To maneuver his support platoon so as to outflank or envelope any resistance holding up the advance of the assaulting echelon.

(c) To make the necessary dispositions to protect the flanks of the assaulting platoons against counterattacks.

(d) To prevent the support platoons from merging themselves into the assaulting echelon and to keep them under the nearest available cover when not advancing; during progression to select successive positions for the supports prior to departure from the preceding position (advance by bounds).

(e) To insure mutual support of his platoons and lend support to adjacent companies.

The position of the captain is where he can best carry out these missions. Usually he is with the support platoons or between them and the assaulting echelon. He must at all times be at a point from which he can observe the action of the assaulting echelon. When the supports have been entirely absorbed in the assaulting echelon, he joins that part of the line from which he can best control the advance of his company.

432. The distance of the support platoons from the assaulting echelon is dependent on the situation and the terrain. They must at all times be close enough to the assaulting platoons to be able to effect a timely reinforcement. In general they should follow the assaulting echelon as closely as cover and the possibility of movement toward a flank will permit.

433. A reinforcement sent to the assaulting echelon joins it deployed as skirmishers. The leader of the reinforcement places it on the flank of the assaulting echelon or in an interval in the line, if one exists, and commands it thereafter as a unit. If this method of reinforcement is impracticable, the reinforcing fraction is advanced with increased intervals between skirmishers; each man occupies the nearest interval in the assaulting echelon and each then obeys the orders of the nearest squad and platoon leader.

434. A reinforcement joins the assaulting echelon as quickly as possible without exhausting the men. Their movement should be similar to that of a group executing a rush.

435. The original platoon division of the companies in the assaulting echelon should be maintained and should not be broken up by the mingling of reinforcements.

Upon joining the assaulting echelon, officers and sergeants accompanying a reinforcement take over the duties of others of

like grade who have been disabled or distribute themselves so as best to exercise their normal functions. Conditions will vary and no rules can be prescribed. It is essential that all assist in mastering difficulties of control.

The reinforcing of the assaulting echelon by driblets of a squad or a few men has no appreciable effect. The assaulting echelon requires either no reinforcement or a strong one. Generally a section or a platoon will be sent forward under cover of a heavy fire of the assaulting echelon.

436. As soon as he loses contact with the enemy, the captain reestablishes it by the further advance of the combat line. In covered ground the advance is preceded by scouts or patrols whose mission is to prevent surprise. The captain keeps the major in touch with the situation and sees that the location of the line is indicated as prescribed or when the aviator requests it.

THE ASSAULT.

437. The captain rapidly organizes his company for assault when his assaulting echelon or a considerable portion of it is held up in front of a local hostile resistance. When his arrangements have been completed he gives the command or signal to charge. The officers lead the charge. The skirmishers spring forward shouting, run with the bayonets at charge, and close with the enemy.

After a successful assault the captain immediately takes steps for the reorganization of the assaulting units. Any available support platoons are immediately started in pursuit, taking over the rôle of the assaulting echelon. By rapid entrance into action of the supports the development of a hostile counter-attack will be prevented and the defeated troops thrown back upon their reserves, masking their fire, and spreading disorder among them. All commanders at once take steps to form temporary groups from the assaulting elements and combine them into larger temporary units.

ORGANIZATION OF THE GROUND.

438. When the advance is definitely stopped, the captain establishes his front line and line of resistance as directed by the major and constitutes the area assigned to his company as a strong point. In absence of directions he acts on his own initiative. He provides for defense in depth, reestablishes contact with adjacent units and the rear, assigns areas of defense and sectors of fire to his platoons, and arranges for their mutual

support by flanking fire. He makes report of his dispositions (sketch) to the major.

Within the shortest possible time, measures should be taken to protect the front with such accessory defenses as can be laid rapidly, and fire and communicating trenches should be dug.

Efforts to secure locations giving good views of the enemy's positions are of the highest importance. Flanking observation is particularly important.

RESERVE COMPANIES.

439. The captain marches ahead of his company and as close as possible to the major. His constant effort must be to cover the flanks of the preceding companies. He also rallies, when necessary, the supports of these companies.

In emergencies, he must not hesitate to act, and he must do so without waiting for orders—such necessities might be, for example, to cover a flank or to stop a counterattack. Constant personal reconnaissance by captains of reserve companies is therefore necessary in order that they may be able to act with knowledge of the situation when the occasion requires. Close contact with the preceding companies must be assured.

Care must be taken to prevent the merging of the reserve companies with the assaulting companies; captains of reserve companies must therefore be familiar at all times with the location of assaulting companies.

440. Before moving their companies from any position during the advance, captains of reserve companies must select an advanced position and decide on the method of advance thereto unless the new position has been designated by the major. In order that this may be accomplished without delaying the progression, captains must constantly reconnoiter the ground to their front.

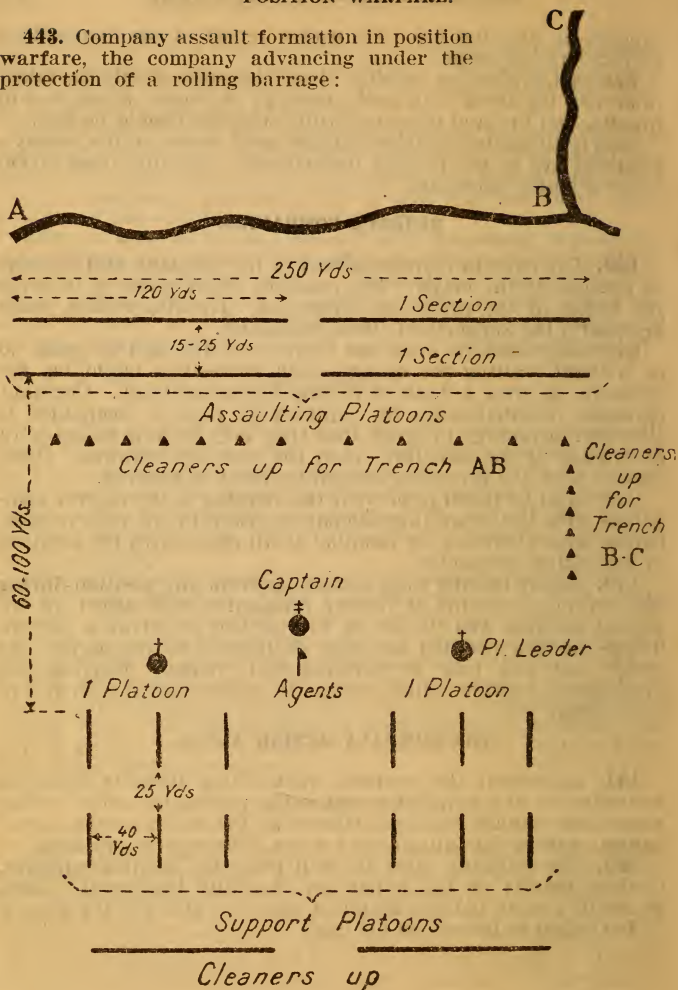
THE COMPANY ACTING ALONE.

441. In general, the company when acting alone, is employed according to the principles applicable to the battalion acting alone; the captain employs platoons as the major employs companies, making due allowance for the difference in strength.

442. The company must be well protected against surprise. Combat patrols on the flanks are specially important. Each leader of a flank platoon details a man to watch for the signals of the patrol or patrols on his flank.

POSITION WARFARE.

443. Company assault formation in position warfare, the company advancing under the protection of a rolling barrage:



NOTE.—Formation varied to meet requirements of situation.

11. THE BATTALION.

444. The battalion is the attack unit whether operating alone or as part of a larger unit. It generally attacks as a mixed unit, comprising not only infantry companies but also all the accompanying weapons of the infantry regiment and accompanying artillery.

ADVANCE IN ROUTE COLUMN.

445. The battalion advances in column of route until the situation requires its extension. The time of extension should be so selected that the battalion does not enter the zone of hostile fire in close formation but on the other hand avoids useless detours and premature abandonment of the route of march.

446. The major directs the necessary reconnaissance to locate areas under hostile shell fire and determine the point at which the extension of the battalion will become necessary. He details the necessary covering detachments to protect the advance of the battalion and develop the enemy's position in his zone of attack.

The covering detachment deals with any hostile patrols and advanced posts which have not been cleaned up by the covering detachments of the larger units (regiment, brigade, or division), or which have succeeded in passing through them. The major maintains close touch with his covering detachment by means of orderlies or runners. The strength of the detachment will be increased when the front is not covered by detachments from the higher units.

447. In some cases, as in a rapid pursuit, the advance may be covered by an advance-guard company which advances on a broad front and endeavors to hold the enemy fast by its fire while other companies, designated by the major, move forward and execute outflanking movements. In the attack of an enemy in position, however, the function of the covering detachment is limited to securing the march of the battalion and developing the enemy's position; the major will endeavor to retain in his own hands the power of engaging his companies according to a definite plan of action and not allow them to become involved in a planless action initiated by advance detachments.

Throughout the advance into action the major is at the head or in advance of his leading company.

448. The combat train of the battalion ordinarily follows the battalion during the advance into action. Prior to extending his battalion the major will cause extra ammunition to be

issued from the combat train and direct the emptied wagons to proceed to the rendezvous designated by the regimental commander to be refilled.

APPROACH MARCH.

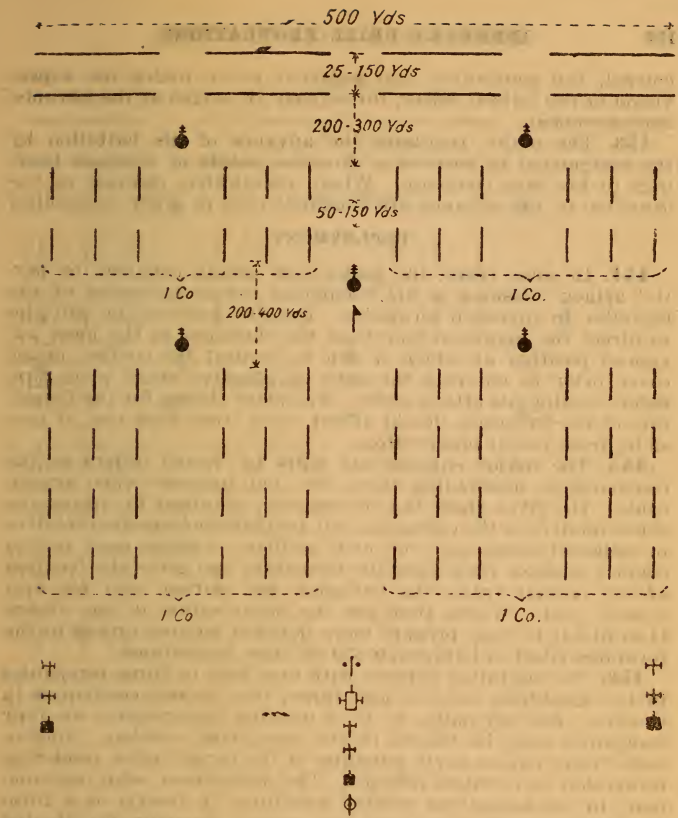
449. In extending his battalion, the major assigns the direction of the advance, designates the base company, and prescribes the formation. As a rule, the battalion extends on the leading company. The extension is generally best effected by changes of direction of the heads of the companies.

450. The formation to be taken will depend upon the situation at the time of extension. If sufficient information is available, the companies may be formed in echelons corresponding to the echelons in which they will deploy for attack. Otherwise they are disposed in a formation affording maximum security against loss and adapted to forming for attack in any direction. If the flanks are not protected by other units a formation in which the flanks of the battalion are echeloned to the rear is generally most effective (for example, one company in advance, one company to the right rear and one company to the left rear of the leading company, one company in rear of the center of the three leading companies).

451. After extension of the battalion and before coming within range of the enemy's guns, the battalion marches toward its successive direction points in the zone of advance assigned to it, in an approach formation adapted to the terrain. This formation may be similar to that shown in figure 2, except that the leading echelon will be formed in small columns and the position of the major will be at the head, or in advance, of the battalion. Distances and intervals are increased when crossing ridges and other prominent terrain lines which can not be avoided. At times it may be advisable to cross particularly dangerous lines (roads, crests, embankments) by surprise and whole companies at a time; the units take care not to debouch from cover at the same point. Or the line may be crossed by successive rushes of individuals widely separated who re-form on a designated line in advance.

Temporary variations in distances and intervals required by the terrain or the situation are made by company commanders on their own initiative.

452. The major conducts constant personal reconnaissance with a view to locating areas swept by hostile shell fire. Whenever practicable such areas are avoided. Signalmen and runners maintain connection between the major and his message center when he leaves the battalion for purposes of reconnaissance. They also maintain communication with the



LEGEND

—	Section in skirmish line	●	Captain	⊙	Accompanying Artillery.
	Section in squad columns	⊙	Major	+	Section machine guns.
■	Machine gun carts and animals of 1 m g platoon	⬮	Bn Agents		
⬮	Section of light mortars and one pounder.				
⬮	Transportation of light mortars, limbers and animals of one pounder gun				

Fig. 2.

colonel, the companies, and adjacent units, under the supervision of the liaison officer, throughout all stages of the advance and of combat.

453. The major regulates the advance of his battalion by the assignment of successive direction points or compass bearings to his base company. Where practicable, changes in the direction of the advance are communicated to other companies.

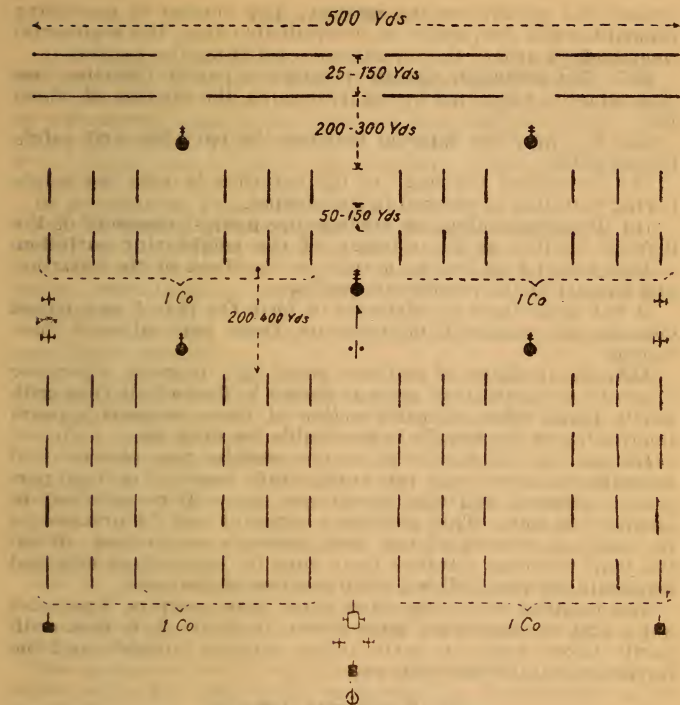
DEPLOYMENT.

454. In some cases, the major may assign complete or partial attack missions to his companies before extension of the battalion in approach formation. Usually, however, he will aim to direct the approach march of his battalion to the most advanced position at which it can be formed for combat under cover prior to entering the zone of effective small arms fire, before issuing his attack order. The place chosen for the formation of the battalion should afford cover from view and, if possible, from aerial observation.

455. The major engages his units by verbal orders to the commanders, assembling them for that purpose when practicable. He gives them the information obtained by reconnaissance relative to the enemy and all available information relative to adjacent units and our own artillery, assigns each unit a combat mission, prescribes the formation and gives the location of the combat train, the battalion aid station, and his own combat post. Where time for the organization of the attack is available he may prepare more detailed written orders in the form described in paragraph 339 of these regulations.

456. The battalion deploys with one, two, or three companies in the assaulting echelon and three, two, or one companies in reserve. Exceptionally, as in a meeting engagement, all four companies may be placed in the assaulting echelon. Such a deployment causes early mingling of the larger units, rendering leadership and control difficult. The deployment with one company in the assaulting echelon and three in reserve is a form of advance-guard formation, the leading company functioning as a reconnoitering and containing unit. The disposition with two companies in the assaulting echelon and two in reserve gives a uniform deployment in depth and frontage and is especially adapted to meeting a counterattack from any direction and to a uniform progression of the attack. Depth is required for an attack which seeks a decision; extension in width for a containing engagement or demonstration.

In general, the number of companies assigned to the assaulting echelon will depend on the frontage assigned to the battalion and the situation. The more obscure the situation, the



LEGEND

—————	Section in skirmish line	●	Captain	⊕	Accompanying
	Section in squad columns	●	Major		Artillery
		↑	Bn Agents	+	Section machine gun
■	Machine gun carts and animals of 1 m. g. platoon.				
⊕	Section of light mortars and one pounders				
⊕	Transportation of light mortars, limbers and animals of one pounder gun				

Fig. 3.

greater the strength of the reserve. The number of assaulting companies will frequently be determinable from the regimental commander's order; the remainder constitutes the reserve.

457. The battalion usually employs a patrol (platoon, section, squad), supported by machine guns, the mission of which is:

(a) To cover the interval between the battalion and neighboring units.

(b) To protect the flank of the battalion in case the neighboring battalion is checked in its advance.

(c) To bring oblique or enfilade fire against elements of the defense holding up the advance of the neighboring battalion.

This patrol marches, as a rule, on the flank of the battalion and abreast of the reserve companies.

It will sometimes be advisable to form the patrol as a mixed detachment composed of elements from two adjacent battalions.

458. The position of machine guns, light mortars, 1-pounder guns and accompanying guns as shown in figure 2, is that ordinarily taken when an early action of these weapons appears improbable or the terrain is unsuitable for their use.

During the advance, the center machine-gun platoon will normally be used only for antiaircraft work. For this purpose a corporal and one private per gun will be sufficient to operate the gun. This permits a sergeant and 14 privates to be detached to each of the flank platoons as carriers. When the flank platoons advance their guns by hand, these attached sergeants are responsible for the progress of the carts.

The position of the machine guns, light mortars, 1-pounder guns, and accompanying guns shown in figure 3, is that ordinarily taken when an early action appears probable and the terrain is suitable for their use.

ADVANCING THE ATTACK.

459. If his battalion be one of several in the first line, the major, in executing his part of the attack, pushes his battalion forward as vigorously as possible within the front, or section, assigned to it. The great degree of independence allowed to him as to details demands, in turn, the exercise of good judgment on his part. Better leadership, better troops, inequality in the hostile resistance, and more favorable terrain enable one battalion to advance more rapidly in attack than another less fortunate, and such a battalion will insure the further advance of the others.

THE FIRE ATTACK.

460. During this phase, the advance of the assaulting companies is mainly in the hands of the assaulting company, platoon, section, and squad commanders, who advance the attack by mutual fire support and alternate fire and movement. The major intervenes when necessary to push forward companies who hesitate and to insure the necessary cooperation between companies when this is lacking.

In principle the rôle of the major is:

(a) To employ accompanying weapons and machine guns in support of the advance of assaulting companies.

(b) To maneuver his reserve companies so as to envelope hostile resistances or cover gaps arising between assaulting companies.

(c) To reinforce assaulting companies when they become depleted in strength.

(d) To forward ammunition to the company supports by carrying parties or with reinforcements.

(e) To take the necessary action to protect the flanks of the battalion or of adjacent units against counterattack.

(f) To prevent reserve companies from merging themselves into the first line and keep them under the best available cover within supporting distance of the assaulting companies when not advancing; during progression to select successive positions for the reserve prior to departure from the preceding position (advance by bounds).

(g) To select successive positions for the battalion ammunition point as the attack progresses and issue instructions at the proper time for the movement of the combat train to the point selected.

The danger of an uncontrolled merging of the battalion reserves with the assaulting companies is particularly to be guarded against when the combat line is checked in front of a hostile strong point, powerfully organized. In this case reinforcement is generally ineffective and an outflanking or enveloping movement is necessary.

The position of the major should be such that he can observe the progress of assaulting companies and control the action of reserve companies and accompanying weapons.

461. The major must anticipate possible counterattacks and be able to detect and to check any menace against his flanks. It is the essential rôle of units not engaged to be able to act immediately in the threatened directions, especially the machine guns and light mortars, which follow the attack from one position to another. Dangerous localities must be especially watched.

THE ASSAULT.

462. The hostile position will frequently be reduced by a series of local assaults executed at different times by small units (squads, sections, platoons, companies).

It will sometimes happen, however, that the entire battalion is held up in front of a strong hostile resistance which can not be outflanked. In such case the major must arrange for a prepared assault with the support of artillery, machine guns, and accompanying weapons. He must either fix an hour for the delivery of the assault or employ a preconcerted signal for that purpose.

Under the cover of the supporting fire the assaulting units advance as close to the objective as possible, and when the preparatory fire ceases or is lifted from the objective charge the hostile resistance in a single rush.

After the assault it will frequently be necessary to reorganize the assaulting companies and to continue the advance with the reserves, who then take over the rôle of the assaulting echelon.

ORGANIZATION OF THE GROUND.

463. When the advance is definitely stopped and can make no further progress, the major must organize the ground for defense. During the day the dispositions made will relate chiefly to reserve companies; the assaulting troops will have to dig in wherever they find themselves. At night the battalion commander should complete the organization for defense by—

(a) Establishing his front line at least 200 or 300 yards from the enemy position, leaving small security detachments in front of it.

(b) Establishing a line of resistance.

(c) Assigning to companies sectors of fire and areas of defense which will constitute strong points capable of all-around defense and mutually flanking each other.

(d) Disposing his machine guns so as to flank the front and cover the flanks.

(e) Assigning to certain units the mission of counterattack.

Prompt information as to his dispositions should be forwarded to the regimental commander and the artillery.

THE MACHINE-GUN COMPANY.

464. Every assaulting battalion is habitually reinforced by a machine-gun company which reports to and is under the orders of the battalion commander. The company ordinarily

works by platoons, one platoon supporting each assaulting company.

465. The commander of the machine-gun company retains command of his entire company; the assignment of platoons to support assaulting companies does not imply a transfer of command over such platoons to the rifle-company commanders.

466. If only two rifle companies are in the assaulting echelon one platoon of the machine-gun company is assigned the missions of anti-aircraft defense, security of the flanks of the battalion, and furnishing replacements for the first-line platoons.

467. At the beginning of an attack, the machine-gun platoons will at first usually follow in rear of the assaulting companies, provided the character of the terrain renders their early use probable. Otherwise they follow in rear of the reserve companies.

468. After the enemy has been located, the guns of each platoon habitually work in pairs, one pair remaining in position on commanding ground to cover the advance of the other pair to a suitable firing position in advance. All changes of position are, as a rule, by echelons of half platoons. Except in the early stages of the attack, a steady advance of machine guns will seldom be advisable.

469. A platoon supporting the advance of an infantry company ordinarily fires from commanding positions over the heads of the troops.

470. The machine-gun company commander remains near the battalion commander. He takes full advantage of every opportunity to concentrate the fire of his platoons, usually without changing their position, on those hostile nests or strong points which are making most trouble. He shifts the fire of his platoons whenever practicable to give flanking instead of direct fire. He must take advantage of every opportunity to bring forward his machine-gun and ammunition carts.

471. Platoons in support of assaulting companies should send forward agents, usually a noncommissioned officer and two privates, to the rifle companies. Fire from the supporting machine guns will, as a rule, most promptly be secured by a rocket signal.

472. While machine-gun commanders must carry out the missions assigned them by battalion commanders, they must not place a narrow interpretation on them. They must frequently act on their own initiative in order to take prompt advantage of fleeting opportunities. To meet this requirement constant touch with the situation by reconnaissance to the front and flanks is indispensable.

1-POUNDERS AND LIGHT MORTARS.

473. For an attack, these weapons are best organized into sections, each consisting of a 1-pounder gun and a light mortar under command of a section leader.

One or more sections are usually assigned to each attacking battalion; when more than one section is so assigned, the sections are united into a group. The section or group commander reports to and is under the orders of the battalion commander.

474. The 1-pounder and the light mortar are used to prepare and follow up the attack, to break any resistance which develops in the course of the advance, and to cooperate in the occupation of a conquered position. During the advance their principal mission is the destruction of machine guns and machine-gun nests. The 1-pounder should not, as a rule, be used against other targets than machine guns or tanks.

475. The section or group advances by bounds from one firing position to another along well-defiladed routes, which should be reconnoitered in advance.

476. Reconnaissance of objectives encountered during the advance will determine which weapon can be most effectively employed against them. If the reconnaissance develops a plainly visible target, the 1-pounder gun should be used; if, on the contrary, the exact location of the target can not be determined but only the area within which the target must lie, the fire of the light mortar should be applied.

477. The section or group commander must maintain constant touch with the situation and battalion commander. The battalion commander must direct the reconnaissance of the section or group commander and by his own personal reconnaissance exploit every opportunity which the situation offers for the effective employment of these weapons in support of the attack. Group and section commanders must frequently act on their own initiative to take timely advantage of fleeting opportunities.

478. In position warfare, the 1-pounder gun is installed before the assault in an emplacement from which it can efficiently serve the following purposes:

Demolish machine-gun positions which may show themselves at the last minute.

Sweep those parts of the hostile position which are dangerous for the flanks of the attack.

Fire upon the rear defensive lines.

To prevent its destruction it is advisable to put it into action only at the last moment.

Any use made of the gun prior to the attack must not interfere with its advance with the battalion to which it is assigned.

AMMUNITION SUPPLY.

479. The extra ammunition of a battalion going into action is carried in its combat train. Ammunition is issued from the combat train prior to the formation of the battalion for action.

480. The combat train includes all personnel, vehicles, and animals attached to the battalion and the units accompanying it in action for transporting ammunition reserve and special equipment required during combat, including the medical cart or mule. The rolling kitchens and water carts are usually attached to the combat train.

481. The point at which the combat wagons are emptied is established as the initial ammunition point of the battalion under charge of the munitions officer of the battalion. The emptied wagons are returned to the ammunition distributing point designated by the regimental commander.

482. In maintaining the ammunition supply of the battalion during action, ammunition is pushed forward as far as possible by wagon; then if practicable by cart or pack mule; and finally by carriers or reenforcements. Subject to this general principle, the following may be taken as the basis for the organization of the chain of ammunition supply in action:

(a) From the distributing point designated by the regimental commander to the battalion ammunition point: Transportation by the combat wagons of the battalion.

(b) From the battalion ammunition point to the battalion reserve: Carts, pack mules, or carriers (preference in the order stated, according to the situation).

(c) From the battalion reserve to the company supports: Carrying parties.

(d) From the company supports to the assaulting echelon: Reenforcements.

At night it will generally be possible to move the ammunition farther forward by the combat wagons and to bring it to the assaulting echelon by carriers.

483. Carrying parties should, when practicable, be detailed from the regimental reserve and attached to assaulting battalions in accordance with necessities.

484. When the ammunition point is displaced as the attack progresses, an agent should be left at the old ammunition point to direct vehicles to the new location.

RESERVE BATTALIONS.

485. Reserve battalions advance in approach formation according to the principles set forth for the advance of the assaulting battalions. As a rule, the detail of covering detachments

to protect their advance will not be necessary, provided contact with units toward the front and flanks is maintained.

486. Reserve battalions conform to the movement of assaulting battalions and cover their flanks, especially with machine guns. The majors maintain close touch with the majors of assaulting battalions whom they may be called on to support and with neighboring units. They keep themselves constantly informed as to the situation in order that they may intervene effectively when their support is called for.

487. Majors conduct constant reconnaissance of the ground to their front during the advance with a view to locating successive positions for their battalions in their forward movement in support of the attack. They move their battalions from one position to another as directed by the colonel or in accordance with general instructions issued by him.

488. During the attack, a reserve battalion advances in approach formation always ready to intervene. It may be engaged either on the flanks of the assaulting battalion or by executing a passage of lines through the assaulting battalion. In the latter case, it relieves the original assaulting battalion and takes over the rôle of assault.

489. When a battalion executes a passage of lines, it begins by halting in the same formation as the battalion that it has to pass. It re-forms on the base company designated and advances in small columns until its leading elements reach the advance elements of the preceding battalion.

The battalion commander causes appropriate signals to be given when the movement has been completed. The leading echelon deploys as soon as it has passed the line of the assaulting battalion.

490. The passage of lines creates a critical moment during which the density of the waves is doubled or at least very much increased. In consequence, the duration of this period must be reduced to a minimum. This demands that the beginning of the passage of lines should precede the hour set for the resumption of the offensive only by the period required for the execution of the passage. When the advance is to be preceded by a creeping barrage, a few minutes must be allowed in order to make sure that the passage executed by the assaulting echelon shall not be completed before the barrage resumes its advance. The necessity for coordinating the advance of the barrage and that of the infantry is of prime importance.

491. At the commencement of the assault in position warfare, a reserve battalion in second line follows close on the heels of the assaulting battalion so as to escape the hostile barrage; it gains the necessary distance from the assaulting battalion on entering the hostile position.

POSITION WARFARE.

492. The cleaning up of captured positions is an extremely important operation which must be executed with method and rapidity. As a rule, cleaning-up units are not taken from the assaulting companies. Exceptionally, they may be taken from the battalion reserve companies. In the general case they should be detailed from the regimental reserve. The battalion commander determines the assignment and duties of the cleaning-up units placed at his disposal by the colonel or taken from his battalion. He assigns to each one of them certain dugouts, trenches, and communicating trenches, and determines the new mission that will arise when these units have completed their duties. Several units are kept in reserve to be used against dugouts which may have escaped notice.

493. Cleaning-up units may be divided between the first and second echelons, advancing behind them, or all may follow the second echelon.

494. The mission of cleaning up the trenches, shelters, and dugouts passed by the assaulting waves falls to tactical fractions of variable strength. These units may vary in strength from a section to a battalion, according to the available information as to the enemy's dispositions.

495. Cleaning-up units will sometimes have to undergo hard fighting; certain of them may have to content themselves with immobilizing the points of resistance which the commander has decided to have the assaulting waves envelop and await the reduction of the resistance by the assaulting troops before commencing the operation of cleaning up. It is advisable to give members of cleaning-up units a special insignia (arm band).

12. THE REGIMENT.

496. The regiment constitutes the complete tactical and administrative infantry unit. It disposes not only of infantry battalions but also of all auxiliary infantry weapons and of signal and pioneer units. It generally has direct control of a varying allotment of supporting artillery. It is self-contained in respect to supply, being equipped with the necessary transportation to insure replenishment.

ADVANCE INTO ACTION.

497. After having been assigned his mission by the brigade commander, the colonel conducts the advance of his regiment into action. He provides for the necessary covering detachments to develop the enemy's position and assigns objectives

or lines of advance to his battalions. The colonel is with the leading elements of his command.

DEPLOYMENT.

498. The colonel engages his battalions by the assignment of combat missions to his available battalions, to which he allots the quota of accompanying weapons and machine guns necessary for carrying out these missions. He retains direct control over his reserve, infantry batteries attached to the regiment, the technical means of intercommunication, and the service of supply.

499. The regiment deploys for action with:

(a) Two battalions in the assaulting echelon and one in reserve.

(b) One battalion in the assaulting echelon and two in reserve. Both of the reserve battalions may be at the disposition of the colonel, or one battalion only, the other being held at the disposition of the brigade or divisional commander.

Exceptionally, all three battalions may be deployed abreast.

THE ATTACK.

500. Over open ground, reserve battalions advance from cover to cover in approach formation as directed by the regimental, brigade, or divisional commanders, according as they are in regimental, brigade, or divisional reserve. They are held in readiness to guard against counterattacks, especially on flanks, to reinforce the assaulting battalions by extending the front, or to take in flank resistances holding up the advance of adjacent regiments. They are not employed, as a rule, without the order of the colonel or higher commanders.

501. Elements of reserve battalions may sometimes be placed at the disposition of assaulting battalions when the latter become depleted in strength. As a general rule, however, effort should be made to maintain the integrity of reserve battalions and to engage them as units. As the situation may require them to be put into action on very short notice, they should be constituted for combat on the same principles as assaulting battalions.

502. It is the especial duty of the colonel to employ his reserve battalions to support the attack, not only of his own assaulting battalions but also that of less advanced neighboring units, by taking in flank resistances holding out in their front or counterattacks directed against them. At critical junctures the situation may require that he lead his reserve into

action in person. He should at all times be close enough to his reserve to engage it in a timely manner.

503. During combat, the colonel keeps in touch with the situation to his front and flanks by personal observation and reconnaissance or by means of special observation posts and patrols. He insures close support of the assaulting battalions by the artillery and directs the forward displacement of his infantry batteries (see paragraphs 529-538) whenever the advance of the assaulting battalions renders it practicable. He maintains touch with his battalions, adjacent regiments, the supporting artillery, and the brigade commander.

PURSUIT.

504. If the enemy withdraws in front of the regiment, the regimental commander directs the pursuit, forming his regiment in column of route, if out of effective range of hostile artillery, and detailing the necessary covering detachments. His post in the pursuit is with the leading elements of his command.

ORGANIZATION OF THE GROUND.

505. When the advance of the regiment is definitely held up and further progress is impossible, the regimental commander takes steps for the security of the regiment and the holding of the ground. When a strong hostile reaction, accompanied by a violent artillery preparation, is anticipated, he organizes his regiment in depth; according to the situation, he disposes it over one or two positions. In the latter case, either in accordance with instructions of higher commanders or on his own initiative, he establishes an outpost zone and fixes its line of resistance, selects the main defensive position, fixes its line of resistance, and assigns battalions to the outpost position, the main position, and the reserve. He arranges for artillery support of the outpost zone and the main position and disposes his machine guns so as to cover the front and flanks and the entire area between the outpost line of resistance and the main position.

When the regiment is disposed on one position only, two battalions will usually be placed in the first line and one in reserve.

SUPPLY.

506. The colonel supervises and directs the service of supply of the regiment. He regulates the movement of the regimental trains between the distributing points of the regiment and the

battalion ammunition and supply points or company kitchens. He supervises the issue of supplies at the distributing points and makes timely requisitions for supplies required.

MEDICAL SERVICE.

507. As the advance progresses, the medical personnel attached to assaulting battalions collects, dresses, and cares for the wounded at suitable collecting points under the best available cover. The regimental medical personnel takes over the wounded at the battalion collecting points, relieving the battalion personnel, which rejoins its unit; the regimental personnel also furnishes the necessary replacements to the battalion personnel.

During an advance the regimental responsibility in respect to casualties consists in the collection, dressing, and care of the wounded prior to their evacuation by the divisional sanitary train. Except when acting alone, the regiment has no responsibility in respect to evacuation.

PRISONERS.

508. Prisoners are turned over by assaulting battalions at collecting points designated by the regiment, which evacuates them as directed by higher commanders.

PIONEER PLATOON.

509. During a steady progression, the pioneer platoon has few if any purely pioneer duties. It may sometimes be employed in assisting the advance of the accompanying weapons and other miscellaneous duties. During temporary periods of stabilization or when troops bivouac on the battle field at night, the pioneer platoon constructs temporary shelters for command posts, message centers, and observation posts. A certain proportion should be attached to battalions for this purpose.

STAFF.

510. To assist him in the execution of his various tasks, the colonel has a tactical and administrative staff, comprising an operations officer, an intelligence officer, a liaison officer, an adjutant, a supply officer, and a medical officer. An artillery officer is usually attached for purposes of liaison with the artillery and as a technical advisor in artillery matters.

13. THE BRIGADE.

511. The brigade is a purely tactical unit which has as its function to direct and coordinate the action of its component regiments and support their attack by use of its reserves, its machine-gun battalion, and attached artillery. The composition of the brigade is frequently temporarily altered by the attachment of varying quotas of auxiliary troops.

ADVANCE INTO ACTION.

512. On deployment of the division, the brigade is assigned a zone of action, line of advance, or other mission. On receipt of his orders, the brigade commander conducts his brigade in column or in line of regiments until it becomes advisable to break it up into smaller columns. He makes the necessary provision for the reconnaissance of the brigade objective and precedes his command as far as possible in order to reconnoiter the ground personally and be prepared to issue his orders promptly.

DEPLOYMENT.

513. In deploying his brigade, the brigade commander assigns to each regiment its zone of action, line of advance, or other mission. He provides for tactical liaison with adjacent brigades by the detail of strong combat patrols to which machine guns should be attached.

514. The brigade is usually deployed with the two regiments abreast. When the two brigades of the division are deployed abreast, one battalion of one regiment will usually constitute the brigade reserve and one battalion of the other regiment will usually be in divisional reserve.

When the division is deployed in column of brigades, the brigade reserve only is furnished by the first-line regiments.

515. The brigade commander usually assigns to each regiment one machine-gun company from the brigade machine-gun battalion. He apportions the attached infantry batteries (see paragraphs 529-538) and other auxiliary troops to regiments and retains a portion thereof under his own immediate control in accordance with the requirements of the situation.

516. During the approach march of his regiments and throughout the combat he stations himself at points from which he can personally observe the course of the action and keep in touch with the situation on parts of his front screened from his view by means of special patrols and observation posts.

THE ATTACK.

517. The brigade commander keeps in touch at all times with the positions of his regiments and adjacent regiments and is prepared to cover any gaps which may arise between them by the use of his reserve battalions or machine-gun companies.

He advances his reserve from position to position in accordance with the progress of the attack and engages it when necessary to check a counterattack, to envelope a resistance, or take it in flank by operating through a gap arising between the regiments or between them and adjacent regiments.

By close touch with the division he insures support of the attack by the divisional artillery.

He directs the displacement forward of infantry batteries remaining under his control whenever the advance of the assaulting battalions renders it practicable to do so.

When practicable he employs his reserve machine guns to support the assaulting troops by overhead fire and to provide the necessary antiaircraft defense.

He keeps the division commander informed at all times as to the situation of his troops.

ORGANIZATION OF THE GROUND.

518. When the advance of the brigade is definitely stopped by hostile resistance, the brigade commander takes steps to organize his troops in depth, if the situation requires such action. Depending on the character of the hostile reaction anticipated, he disposes his brigade on one or two positions. In the latter case, either pursuant to instructions of higher commanders, or on his own initiative, he fixes on the line of resistance of the outpost zone and of the main position, assigns zones of depth to his regiments, arranges for artillery support, and organizes the machine-gun defense of the intermediate zone between the two positions. He organizes the defensive works to be constructed, determines on the order of their construction, details laboring parties, and allots the necessary engineer personnel and matériel to the different positions.

Under other circumstances he may arrange for the defense of only one position with a single line of resistance.

RESERVE BRIGADE.

519. When the division is deployed in column of brigades, the post of the commander of the reserve brigade is usually with the commander of the assaulting brigade, where he can

maintain constant touch with the situation and be prepared to take over the rôle of commander of the assaulting troops when the moment for the engagement of his brigade arrives. He must be in communication at all times with his own brigade in order that he may promptly engage it or order up units from it as reinforcements to the first-line brigade when such action is ordered by the division commander.

STAFF.

520. To assist him in the execution of his duties, the brigade commander has a tactical staff consisting of an adjutant and one assistant. An artillery officer is usually attached for purposes of liaison with the artillery and as a technical advisor in artillery matters. The brigade machine-gun officer acts as a technical and tactical assistant in machine-gun matters.

14. INTERCOMMUNICATION.

521. Communication is maintained by means of staff officers, runners, orderlies, carrier pigeons, telegraph, telephone, visual signals, radio, airplanes, and light signals (flares, rockets, etc.). The operation of the technical means of communication is governed by the provisions of Liaison for All Arms.

522. The special personnel at the disposition of infantry units comprises signal units attached to brigades from divisional signal troops, the signal platoons of the infantry regiments, and the orderlies and runners attached to the headquarters of the several units.

523. Every infantry unit down to and including the battalion has an officer in charge of the communications and the message center of the unit. This officer is known as the liaison officer of the unit.

524. The message center consists of three sections: a courier section, a record section, a section for liaison agents. The courier section is under charge of an officer or noncommissioned officer of the Signal Corps or the signal platoon and controls the various mechanical means of transmission and all runners and couriers. It determines what means of transmission will be used and is responsible for the prompt delivery and acknowledgment and receipt of all orders and messages. The record section of the message center is under charge of a suitable officer or noncommissioned officer. This section is charged with the duplication, recording, coding and decoding, and keeping the files of messages and orders sent and received. It determines the priority of messages to be set where this has not been determined

by the commanding officer. It prepares the necessary copies of messages and reports for the information of liaison agents and assists in the keeping of the War Diary.

The section for liaison agents is directly in charge of the liaison officer. All information concerning the units of the liaison agents is sent to this section from the record section. Liaison agents will use their own couriers for messages. They may request the use of the mechanical means of the message center, and the liaison officer will assist them as far as possible, but no record is made of such messages.

525. In establishing the system of intercommunication, the division pushes forward an axial telephonic line, the head of which is at all times maintained at least as far forward as the regimental posts of command. This axial line should always be supplemented by radio stations, and whenever possible, by visual signaling stations. Brigades make connection with the axial line, employing the signal troops and matériel placed at their disposition by the division. Regiments similarly connect their posts of command or message centers with the axial line, employing the personnel and matériel of their signal platoons. The connection from the regiment forward to the battalions is, in so far as the nature of the operation renders it practicable to do so, also established by the regimental signal platoon under the direction of the regimental commander.

526. Telephonic communication between the message center of infantry brigades and regiments and the message centers of supporting artillery units is maintained by the artillery. Communication with the artillery should as a general rule be effected through the artillery liaison officer.

527. The establishment of intercommunication by personal agents comprises:

A. Mounted messengers or cyclists.

B. Individual runners or runner relays.

Intercommunication by mounted messengers or cyclists is maintained as far forward as the hostile fire and the nature of the terrain will permit. The message center of each unit from which transmission by this means is practicable, should have a number of mounted messengers and cyclists at its disposal. The chain of communication by mounted messengers or cyclists should terminate at a message center.

Runners complete the transmission from the message center where service by mounted messenger ceases to the unit for whom the message is intended. They may operate either singly or in relays of runner posts. The latter method is necessary where heavily shelled areas must be crossed and the greatest possible rapidity of movement is required. When

runner relays are employed the posts should be established at points affording the best possible protection and the distance between posts should not be excessive (150 to 300 yards). Runner relays are established by higher units, and the posts pushed forward behind the assaulting units as the advance progresses. When practicable the routes followed by runners should be along telephone lines; in addition to their duties as transmission agents runners are charged with discovering breaks in the line and with repairing them if possible; runners have a personal interest in the upkeep of these lines.

Where runner chains are not employed each infantry unit before deployment sends one or more mounted orderlies, cyclists, or runners to the next higher unit; they serve as transmission agents from the higher unit to their own commanders. Each subordinate unit transmits its messages to the next higher unit and to adjacent units by its own personal agents.

CHAINS OF SIGNALERS.

528. In clear weather, rocket signals are the best means of rapidly transmitting the requests of the infantry to the artillery. For this purpose chains of signalers should be organized prior to an attack. These chains should extend as far forward as the front line and should pass through the message centers of the various units; the intervals between posts constituting the chain should be short enough to insure the transmission of signals through fog, dust, or smoke. In order to avoid errors the general alignment of the chain should be perpendicular to the front and only signals coming from the front received and transmitted.

Indication by assaulting battalions of their arrival on important terrain lines by means of prearranged rocket signals is one of the most effective methods of insuring effective artillery support and of keeping higher commanders informed as to the situation.

15. SUPPORTING ARTILLERY.

529. Artillery units are temporarily assigned to infantry for the purpose of closer cooperation between the two arms and for fire on objectives which can not be observed from artillery positions located farther to the rear. The success of their action depends upon the immediate advantage taken by the infantry of the results obtained by their fire.

The artillery thus assigned may be divided into two classes:
(a) Infantry batteries and (b) accompanying guns.

530. Infantry batteries are batteries employed as units under the direction of infantry brigade or regimental commanders. Accompanying guns are guns engaged as single pieces under the orders of infantry battalion commanders.

These assignments are not permanent; they cease upon the execution of the mission for which they were made. Batteries are then returned to control of the divisional artillery commander.

531. If a battalion of artillery is assigned to a brigade, a suitable disposition will frequently be to use two batteries as infantry batteries and to break up one battery for use as accompanying guns. Infantry batteries should be fought as batteries, accompanying guns always by piece, each under an officer when practicable.

532. When there are two infantry batteries per infantry brigade, one may be assigned to each infantry regiment or both held under the infantry brigade commander. The former disposition is ordinarily preferable when regiments are deployed abreast.

When both infantry batteries are held under the infantry brigade commander, the artillery battalion commander commands these batteries, ordinarily remaining with the infantry brigade commander or in close communication with him. When the infantry batteries are assigned to infantry regiments the artillery battalion commander supervises the employment of his batteries as well as the replacement of personnel, matériel, and ammunition.

The missions of infantry batteries include the attack of the stronger points of resistance, defense against local counter-attacks, and firing on hostile reserves.

Fire is habitually by direct observation from near the battery position on specific objectives.

533. Accompanying guns are assigned to assaulting infantry battalions and placed under the command of the infantry majors. The proportion may be one, or even two, per battalion, depending on the front covered.

Accompanying guns attack hostile machine guns, tanks, and strong points.

Fire is direct in the case of clearly visible or moving objectives; otherwise indirect with flash defilade and observation at the piece. The range should be from 500 to 1,500 meters. Ranges are ordinarily estimated. A wide bracket (about 400 meters) is quickly obtained and searched. Ineffective ranges are eliminated during fire for effect.

The pieces are ordinarily moved horsed, unlimbered under cover, and run forward by hand. Caissons are brought as near

the pieces as conditions permit. Accompanying guns find their protection principally in the small target presented, in concealment by natural features, and in their mobility. Two or more caissons should be assigned for the ammunition supply of each piece.

Near-by infantry reserves should be called upon to assist in ammunition supply and in the movement of the piece when necessary.

534. The functions of infantry commanders, having either infantry batteries or accompanying guns under their command, generally consist in indicating missions and supplying information as to enemy and friendly dispositions. Technical details and methods should be left as far as possible to the artillery commander. However, in the absence of a specific mission, the artillery commander should, on his own initiative, use the means at his disposal to locate and attack suitable objectives.

In general, the artillery commander is responsible that the full power of his weapons is developed and aggressively used. The infantry commander must apply this power where it will best assist the infantry.

535. Infantry commanders assigning a mission to the battery should state definitely the locality to be fired upon and the positions of friendly troops. The selection of positions should be left within rather wide limits to the battery commander. The time of attack should be arranged after consulting the battery commander as to the time necessary for the latter to go into battery.

536. Up to the time of the assignment of a mission, the battery commander remains with, or in close touch with, the infantry commander to whom he is attached. When assigned a mission, the battery commander hastens to join the infantry commander whose unit he is to support. After obtaining the necessary information as to the operation contemplated, he makes a rapid reconnaissance of position and meets the battery on arrival in the vicinity or sends an agent to conduct it to the position. The position selected should be at as short a range as is possible, consistent with proper concealment and ammunition supply.

537. Visual concealment in position must be had, but protection must be limited ordinarily to that afforded by the natural features of the position selected. The construction of emplacements is carried only as far as is absolutely necessary for firing. Previously prepared sand bags are necessary. Protection for the cannoneers must not be allowed to delay the opening of fire. The deep defilade possible with this piece is ample protection against hostile fire under open-warfare conditions.

The moral and material effect of a rapid fire, promptly delivered, is great, but if the fire is delayed the enemy is allowed to perfect his dispositions, all the while inflicting losses on our infantry.

538. When a mission has been accomplished, the matériel should be at once withdrawn and loaded on the transport for a further advance.

16. SUPPORTING TANKS.

539. A tank is essentially an auxiliary arm, providing a means of advancing infantry weapons or weapons supporting infantry, under artificial cover invulnerable to small-arms fire. Its missions as a supporting arm are similar to those of the weapons it transports, subject to the limitations imposed by the method of transportation and the powers derived from the protective armor.

540. Like the accompanying weapons, tanks are assigned to support the attack of infantry units and for this purpose are placed under the orders of infantry commanders. In order to direct their employment to advantage, infantry commanders must be familiar with their powers and limitations.

541. Tanks are distributed in depth in order that a portion may be available to take advantage of situations as they arise and to assist the rear infantry echelons in the execution of missions which the situation may impose. The distribution in depth is to a considerable extent automatic and results from the deployment in depth of the infantry units which the tanks support.

542. Tanks must be given a clean-cut mission and a definite objective. The limited field of view of the operator makes it impossible for the tank to locate objectives whose position is not precisely known. Objectives must be located by reconnaissance prior to the attack, or scouts must precede the tanks in the advance at sufficient distance to locate the objective in time to ensure their effective intervention. As the objectives are ordinarily points which hold up the infantry advance, the scouts who precede assaulting units will usually be sufficient to carry out this mission.

543. Infantry must take immediate advantage of an opportunity to exploit a success obtained by a tank. Tanks are unable to exploit their own superiority of fire or hold a position.

544. The position of tanks in the advance depends upon the dispositions of the infantry. As they attract the fire of hostile artillery, they should not be too close to infantry units.

When a tank reaches its objective, infantry should be close enough at hand to exploit the advantage gained.

545. Careful reconnaissance prior to an advance on an objective should be carried out in order that tanks be not committed to an impracticable route.

546. Owing to accidents or mechanical troubles, it is not safe to rely on all tanks reaching their objective. For this reason it will seldom be advisable to detail less than a section of tanks to an important objective.

547. In general, the missions assigned to tanks are:

(a) To cooperate with infantry in attacks against machine-gun nests, strong points, and villages not neutralized by artillery fire.

(b) To cooperate with infantry in cleaning up areas passed over by assaulting troops.

(c) To destroy hostile accessory defenses.

(d) To assist in breaking up hostile counterattacks.

(e) To work with infantry patrols.

(f) To put down a smoke screen on their own front or in front of the infantry (heavy tanks).

548. When a tank is surrounded by hostile infantry, our infantry must free it immediately, not only by counterattack but also by the fire of machine guns, rifles, and automatic rifles, without fear of hitting the tank, which is bullet proof.

549. In the employment of tanks, their limitations in the following respects must be considered:

(a) Ground covered with stumps of trees or large boulders closely spaced, thick woods without lanes or roads, and heavily shelled, water-soaked areas are either impassable for tanks or passable with difficulty.

(b) Light tanks may be put out of action by wire becoming entangled in the treads. Heavy tanks can crush wire entanglements to permit the passage of infantry and with grapnels clear a path for animals and vehicles; they therefore find their most useful employment in the assault of a trench system.

(c) Tanks have a limited radius of action varying with the type. Long marches before coming into position should not be imposed on them. Light tanks have a greater radius of action and greater speed than heavy tanks and are therefore more suitable for mobile operations.

(d) Tanks are vulnerable to direct hits by artillery projectiles, explosions by land mines, and traps across the line of advance of width too great for the tank to span.

On account of their vulnerability to artillery fire, tanks can not halt to assist in holding a position on open ground, where they are exposed to direct hits. When the objective has been gained, they should move on to another objective or be placed under cover. Tanks should be constantly in motion unless they

are covered from hostile artillery fire, either by features of the terrain or by being amongst hostile troops.

(e) They create considerable noise while in movement; especial measures (such as artillery bombardment) must be taken to avoid revealing to the enemy the point of attack by the approach of tanks when forming up prior to assault.

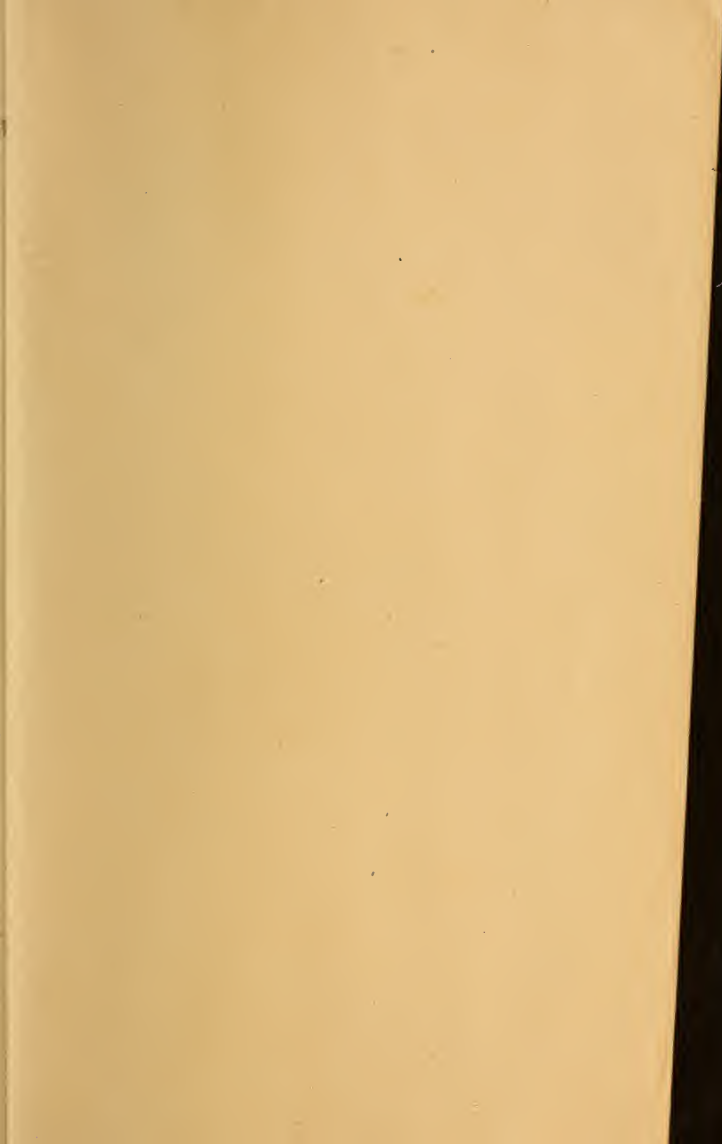
(f) When fired while in movement, their armament falls off considerably in accuracy.

17. INFANTRY AND AIRPLANES.

550. During all offensive operations, the men carrying panels or flares should keep them in a handy accessible position. All men should be thoroughly instructed regarding the airplane signals, markings, and general characteristics of enemy and friendly airplanes. One man from each platoon will be designated especially to watch airplanes. Immediately upon being sighted, an airplane should be closely watched until it is ascertained whether it is enemy or friendly. If it is hostile, preparations will at once be made for firing against it by means of small-arms and machine-gun fire, but no firing will be permitted until directed by platoon or higher commanders. If it is friendly, it will be closely watched for signals. If in wooded country or in deep ravines, the panels will not be shown, but Bengal flares will be burnt at such intervals as to mark the salient points of the line. When the airplane gives the signal, "Understood," all panels will be put away immediately, and the flares will be extinguished, if still burning. All regimental and battalion command posts will display their panels upon receiving the signal, "Where are you?" from the airplane. Response must be made only to the airplane which identifies itself by signal as the airplane assigned to the division.

551. During combat, every machine gun that is not engaged against terrestrial targets will fire on low-flying hostile airplanes. On the march machine guns must be prepared to go into action against airplanes on very short notice. To obtain a successful result from rifle fire against airplanes the combined fire of at least a platoon will ordinarily be necessary; good fire control and discipline and especial instruction in fire against aerial targets are essential to success. Against very low-flying airplanes single shots may be successful under favorable conditions.





MARINE CORPS U LIBRARY



3000170796

Infantry drill regulations Mu 501

